

## A

**accessibility** – The relative ease or difficulty of getting from or to someplace, especially the ability of a site, facility or opportunity to be used by persons of varying physical and mental abilities.

**acid deposition** – Rain, snow, or dry particulate matter containing high concentrations of acid anions (e.g. nitrate and sulfate), usually produced by atmospheric transformation of the byproducts of fossil fuel combustion. Precipitation with a pH lower than 5.0 is generally considered to be acidic.

**acid neutralizing capacity** – The total capacity of a water sample to neutralize acids, as determined by titration with a strong acid. Acid neutralizing capacity includes alkalinity (e.g. carbonate) plus base cations.

**acidification** – To convert into an acid or become acid.

**Agriculture Conservation Program** – USDA cost-share program for streambank improvement.

**acquisition of land** - Obtaining full landownership rights by donation, purchase, exchange, or condemnation.

**acre-equivalents** - The number of acres of forest habitat improved or affected by the installation of various wildlife habitat improvements in an area. Determined by multiplying by various coefficients.

**acre-foot** - A measurement of water volume, equal to the amount of water that would cover an area of 1 acre to a depth of 1 foot (specifically 43,560 cubic feet or 325,851 gallons).

**activity** - A measure, course of action, or treatment that is undertaken to directly or indirectly produce, enhance, or maintain forest and rangeland outputs or achieve administrative or environmental quality objectives.

**adaptive management** – A dynamic approach to forest management in which the effects of treatments and decisions are continually monitored and used, along with research results, to modify management on a continuing basis to ensure objectives are being met.

**administrative unit** - All the National Forest System lands where one forest supervisor has responsibility. The basic geographic management area within a Forest Service Region, station, or area.

**advance regeneration (reproduction)** - Seedlings or saplings that develop, or are present, in the understory.

**aerial logging** – A yarding system employing aerial means, (e.g., helicopters, balloons), to lift logs.

**afforestation** - Establishment of a forest or stand in an area not recently forested.

**age class** - A grouping of living things based on their age.

**age class (cohort)** - A distinct aggregation of trees originating from a single natural disturbance or regeneration cutting.

**Age dependent relationships** - Complex yield composite relationships between independent and dependent variables that vary by the age of the understory and/or the overstory.

**agricultural land** - Areas used primarily for production of food and/or fiber (excludes wood fiber). Examples include cropland, pasture, orchards, vineyards, nurseries, confined feeding areas, farmsteads, and ranch headquarters.

**air pollution** - Any substance or energy form (heat, light, noise, etc.) that alters the state of the air from what would naturally occur.

**air quality class** - Three broad classifications used to prevent significant deterioration of air quality for all areas of the country.

**Class I** - All areas where essentially any degradation of air quality would be considered significant deterioration.

**Class II** - All areas where moderate degradation over baseline concentrations are allowed.

**Class III** - All others.

**all aged stand** - A stand with trees of all, or almost all age classes, including those of exploitable age.

**allocated fund** - Funds transferred from one agency or bureau to another for carrying out the purpose of the parent appropriation and agency.

**allocation** - The assignment of management prescriptions or combination of management practices to a particular land area to achieve the goals and objectives of the alternative.

**allopatric** - Condition where one species lives in a section of stream without other closely related species. The species have disjunct distributions. Opposite of sympatric.

**allotment management plan** - The basic land unit used to facilitate management of the range resource on National Forest System and associated lands administered by the Forest Service.

**allowable sale quantity** - The quantity of timber that may be sold from the area of suitable land covered by the Forest Plan for a time period specified by the Forest Plan. This quantity is usually expressed on an annual basis as the "average annual allowable sale quantity."

**all-terrain vehicle (ATV)** - Any motorized, off-highway vehicle 50 inches or less in width, having a dry weight of 600 pounds or less that travels straddled by the operator. Low-pressure tires are six inches or more in width and designed for use on wheel rim diameters of 12 inches or less, utilizing an operating pressure of 10 pounds per square inch (psi) or less as recommended by the vehicle manufacturer.

**alternative** - In forest planning, a mix of resource outputs designed to achieve a desired management emphasis as expressed in goals and objectives, and in response to public issues or management concerns.

**amendment** - A formal alteration of the Forest Plan by modification, addition, or deletion. Forest Plan amendment requires an environmental analysis. Significant findings require an environmental impact statement and the amendment will follow the same procedure used for plan preparation. Insignificant findings allow the changes to be implemented following public notification. Amendments can take place at any time following plan approval.

**amenity values** - Features or qualities which are pleasurable or aesthetic, as contrasted with the utilitarian features of a plan, project, location, or resource.

**analysis area** - A collection of lands, not necessary contiguous, sufficiently similar in character, that they may be treated as if they were identical.

**analysis area identifier** - A resource characteristic used to stratify the land into capability areas and analysis areas.

**Analysis of the Management Situation** - A determination of the ability of the planning area to supply goods and services in response to society's demand. The AMS is contained in a 182-page report available from the Forest Supervisor. The Forest Plan includes a summary of the AMS. Information from it is contained throughout the EIS/Plan.

**animal unit month** - The quantity of forage required by one mature cow and her calf (or the equivalent, in sheep or horses), for one month; 682 pounds of air-dry forage.

**annual forest program** - The summary or aggregation of all projects that make up an integrated (multifunctional) course of action for a given level of funding of a forest planning area that is consistent with the Forest Plan.

**annual work planning process** - Preparation of technical plans that serve to implement land and resource management, and program decisions contained in the integrated land, resource plans, and budget allocations.

**appropriated fund** - Funds available for obligation or outlay by Congress to a given agency.

**appropriate management response** - The response to a wildland fire based on an evaluation of risks to firefighter and public safety. Circumstances under which the fire occurs, including weather and fuel conditions, natural and cultural resource management objectives, protection priorities, and values to be protected. The

evaluation must also include an analysis of the context of the specific fire within the overall logic, geographic area, or national wildland fire situation.

**aquatic ecosystem** - Components that include: the stream channel, lake and estuary beds, water, biotic community, and associated habitat features. Also included are streams and lakes with intermittently, semipermanently, and seasonally flooded channels or streambeds. In the absence of flowing water, intermittent streams may have pools or surface water.

**aquatic habitat types** - The classification of instream habitat based on location within channel, patterns of water flow, and nature of flow controlling structures. Habitat is classified into a number of types according to location within the channel, patterns of water flow, and nature of flow controlling structure. Riffles are divided into three habitat types: low gradient riffles, rapids, and cascades. Pools are divided into seven types: secondary channel pools, backward pools, trench pools, plunge pools, lateral scour pools, dammed pools, and beaver ponds. Glides, the third habitat type, are intermediate in many characteristics between riffles and pools. It is recognized that as aquatic habitat types occur in various parts of the country, additional habitat types may have to be described. If necessary, the regional fishery biologist will describe and define the additional habitat types.

**arterial roads** - Roads that provide service to large land areas and usually connect with public highways or other forest arterial roads to form an integrated network of primary travel routes. The location and standard are often determined by a demand for maximum mobility and travel efficiency rather than specific resource-management service. They are usually developed and operated for long-term land and resource management purposes and constant service. These roads generally serve areas more than 40,000 acres.

**artificial regeneration (reproduction)** - Creation of a new age class by renewal of a tree crop by direct seeding, or by planting seedlings or cuttings.

**authorized use** - Specific activity or occupancy, including a ski area, historical marker, or oil and gas lease, for which a special authorization is issued.

## **B**

**background** - The area after the middleground in a picture or landscape; generally over 4 miles distance from the viewer.

**bald** - An early successional opening generally above 4,000 feet, characterized by grassy or heath vegetation.

**basal area** - The area of the cross-section of a tree inclusive of bark at breast height (4.5 feet or 1.37 meters above the ground) most commonly expressed as square feet per acre or square meters per hectare. Used to measure the density of a stand of trees. For shrubs and herbs it is used to determine phytomass. Grasses, forbs, and shrubs usually measured at or less than 1 inch above soil level. Trees—the cross-

section area of a tree stem in square feet commonly measured at breast height (4.5' above ground) and inclusive of bark, usually computed by using diameter at breast height (DBH), or tallied through the use of basal area factor angle gauge.

**basal spray** – The application of a pesticide, usually a herbicide for controlling brush or weed trees, directed at the base of the stem.

**base sale schedule** - A timber sale schedule formulated on the basis that the quantity of timber planned for sale and harvest for any future decade is equal to, or greater than, the planned sale and harvest for the preceding decade. The planned sale and harvest for any decade must not be greater than the long-term sustained yield capacity.

**best management practice (BMP)** - A practice, or a combination of practices determined to be the most effective and practical means of preventing or reducing the amount of pollution generated by non-point sources to a level compatible with water quality goals.

**biodiversity** - The variety of life in an area, including the variety of gene pools, species, plant and animal communities, ecosystems, and the processes through which individual organisms interact with one another, and their environments.

**biological assessment** - A “biological evaluation” conducted for major federal construction projects requiring an environmental impact statement, in accordance with legal requirements under Section 7 of the Endangered Species Act (16 U.S.C. 1536(c)). The purpose of the assessment and resulting document is to determine whether the proposed action is likely to affect an endangered, threatened, or proposed species.

**biological evaluation** - A documented Forest Service review of its programs or activities in sufficient detail to determine how an action or proposed action may affect any proposed, endangered, threatened, or sensitive species.

**biological growth potential** - The average net growth attainable on a fully-stocked natural forest land.

**biological oxygen demand** - Dissolved oxygen required by organisms for the aerobic biochemical decomposition of organic matter present in water.

**bladed skid road** - A travel way through the woods formed by loggers to facilitate dragging (skidding) logs from the stump to a log landing. Skid roads are generally used in steep terrain and are cut into mountainsides with a bulldozer.

**board foot** - A unit of timber measurement equaling the amount of wood contained in an unfinished board 1 inch thick, 12 inches long, and 12 inches wide. Commonly, 1,000 board feet is written as 1 MBF, and 1,000,000 board feet is written as 1MMBF.

**browse** - Young twigs, leaves and tender shoots of plants, shrubs or trees that animals eat.

**burning (prescribed)** - The application of fire, usually under existing stands and under specified conditions of weather and fuel moisture, in order to attain silvicultural or other management objectives.

## **C**

**cable logging** – A term for any system involving transport of logs along, or by means of steel cables with the load being lifted partly or wholly off the ground.

**canopy cover** - The percent of a fixed area covered by the crown of an individual plant species or delimited by the vertical projection of its outermost perimeter. Small openings in the crown are included. Used to express the relative importance of individual species within a vegetation community, or to express the canopy cover of woody species. Canopy cover may be used as a measure of land cover change or trend. Often used for wildlife habitat evaluations.

**capability** – The potential of a land area to produce resources, supply goods and services, and allow resource uses under an assumed set of management practices and a given level of management intensity. Note: capability depends upon the current condition and site conditions including climate, slope, land form, soil and geology, and the application of management practices and protection from fire, insects, and disease.

**carrying capacity** - The number of organisms of a given species and quality that can survive in, without causing deterioration of, a given ecosystem through the least favorable environmental conditions that occur within a stated interval of time.

**channel ephemeral streams** - Ephemeral streams that have a defined channel of flow where surface water converges with enough energy to remove soil, organic matter, and leaf litter. Ones that exhibit an ordinary high watermark and show signs of annual scour or sediment transport are considered navigable waters of the United States (USACE, Part 330- Nationwide Permit program, 2000).

**channelization** – Artificial change of a stream channel profile.

**Clean Air Act of 1970** – A congressional act, along with the amendments passed in 1977 and 1990, that provides authority for the Environmental Protection Agency to develop specific regulations controlling air pollution.

**cleaning** - A release treatment made in an age class, not past the sapling stage, in order to free the favored trees from less desirable individuals of the same age class which can overtop them.

**clearcutting** - The harvesting in one cut of all trees on an area for the purpose of creating a new, even-aged stand. The area harvested may be a patch, stand, or strip large enough to be mapped or recorded as a separate age class in planning for sustained yield under area regulation. A method of regenerating an even-aged stand. Regeneration is from natural seeding, direct seeding, planted seedlings, and/or advance reproduction. Harvesting may be done in groups or patches (group or patch

clearcutting), or in strips (strip clearcutting). In the clearcutting system, the management unit or stand in which regeneration, growth, and yield are regulated consists of the individual clearcut stand.

**clearcutting with reserves** - A two-aged regeneration method in which varying numbers of reserve trees are not harvested to attain goals other than regeneration.

**climax** - The culminating stage in plant succession for a given environment with the vegetation having reached a highly stable condition.

**closed road/trail** - A road that is closed for public use.

**co-dominant trees** - Trees or shrubs with crowns receiving full light from above, but comparatively little from the sides. Crowns usually form the general level of the canopy.

**cohort** - a group of trees developing after a single disturbance, commonly consisting of trees of similar age, although it can include a considerable range of tree ages of seeding or sprout origin and trees that predate the disturbance.

**cold water fishery** - Aquatic habitats that predominately support fish species that have temperature tolerances up to about 70°F, and exhibit their greatest reproductive success at temperatures below 65°F (18.3°C).

**collector road** - Roads that serve smaller land areas and are usually connected to a forest arterial or public highway. They collect traffic from forest local roads or terminal facilities. The location and standard are influenced by long-term multi-resource service needs, and travel efficiency. Forest collector roads may be operated for constant or intermittent service, depending on land-use and resource management objectives for the area served by the facility. These roads generally have two or more local roads feeding into them and generally serve an area exceeding 10,000 acres.

**commercial forest land** - Forest land that can produce crops of industrial wood, and has not been withdrawn by Congress, the Secretary of Agriculture, or the Chief of the Forest Service. Existing technology and knowledge must be available to ensure timber production without irreversible damage to soils productivity, or watershed conditions. Adequate restocking can be attained within five years after final harvesting.

**commercial thinning** - Any type of thinning producing merchantable material at least equal to the value of the direct cost of harvesting.

**commercial tree species** - (1) Tree species suitable for industrial wood products. (2) Conifer and hardwood species used to calculate the commercial forest land allowable sale quality.

**commodity outputs** - A resource output with commercial value. All resource products that are articles of commerce.

**compartment** – A portion of a forest under one ownership, usually contiguous and composed of a variety of forest stand types, defined for purposes of locational reference.

**composition (stand)** - The proportion of each tree species in a stand expressed as a percentage of the total number, basal area, or volume of all tree species in the stand.

**constraint** - A restriction or limit that must be met.

**Continuous Inventory of Stand Condition (CISE)** - A system that continuously reflects an up-to-date description of timber stands. It tells what and when actions are planned for stands and gives some information about actions that have taken place. It is also the name of the data base management computer system used for the storage and retrieval of data.

**Controlled Surface Use (CSU)** - Use and occupancy is allowed (unless restricted by another stipulation), but identified resource values require special operational constraints that may modify the lease rights. CSU is used for operating guidance, not as a substitute for the NSO or Timing stipulation.

**conventional logging** - A term used to identify methods commonly used in an area to move logs from stump to mill.

**conversion (forest management)** – A change from one forest type to another in a stand on land that has the capability of both forest types.

**coppice** - A method of regenerating a stand in which all trees in the previous stand are harvested and the majority of regeneration is from stump sprouts or root suckers.

**coppice with reserve** - A two-aged regeneration method in which reserve trees are retained to goals other than regeneration. This method normally creates a two-aged stand.

**cord** - A unit of gross volume measurement for stacked, round wood based on external dimensions, generally implies a stack of 4 x 4 feet vertical cross section and 8 feet long. Contains 128 stacked cubic feet.

**corridor** - A linear strip of land identified for the present or future location of transportation or utility rights-of-way within its boundaries. It can also be identified for wildlife habitat connecting, or protecting forest resources.

**Council on Environmental Quality** - An advisory council to the president established by the National Environmental Policy Act of 1969. It reviews federal programs for their effect on the environment, conducts environmental studies, and advises the president on environmental matters.

**creel survey** – A survey of anglers.



**critical habitat** – Habitat, determined by the Secretary of Interior, essential to the conservation of the endangered or threatened species.

**crown class** - A class of tree based on crown position relative to the crowns of adjacent trees.

**dominant** - Trees with crowns extending above the general level of the main canopy of even-aged groups of trees. They receive full light from above, and partly from the sides.

**co-dominant** - Trees with crowns forming the general level of the main canopy in even-aged groups of trees. They receive full light from above, and comparatively little from the sides.

**intermediate** - Trees with crowns extending into the lower portion of the main canopy of even-aged groups of trees, but shorter in height than the co-dominants. They receive little direct light from above, and none from the sides.

**overtopped (suppressed)** - Trees of varying levels of vigor that have their crowns completely covered by the crowns of one or more neighboring trees.

**cubic foot** - A unit of measure reflecting a piece of wood 12 inches long, 12 inches wide, and 12 inches thick.

**culmination of mean annual increment** - Age at which average rate of annual tree growth stops increasing and begins to decline. Mean annual increment is expressed in cubic feet measure and is based on expected growth, according to the management intensities and utilization standards assumed in accordance with 36 CFR 219.16(a)(2)(i) and (ii). Culmination of mean annual increment includes regeneration harvest yields, and any additional yields from planned intermediate harvests.

**cultural resources** - Physical remains of districts, sites, structures, buildings, networks or objects that were used by humans. They may be historic, prehistoric, archaeological, architectural or spiritual in nature. Cultural resources are non-renewable.

**cunit** - Equivalent to 100 cubic feet of solid wood. Commonly, 100 cubic feet is expressed as 1 CCF.

**cut-offs** - Analysis constraints that prevent the valuation of non-timber outputs produced in excess of demand plus x percent. It ensures that the assumptions of a horizontal demand curve are not violated.

**cutting cycle** – The planned interval between partial harvest in a stand being managed with an uneven-aged regeneration method.

## **D**

**daylighting** - The practices of cutting back edges of roads or trails by removing shrub and tree growth.

**decision criteria** - Rules or standards used to evaluate and rank alternatives.

**den trees** - Trees having rainproof, weather-tight cavities used by wildlife.

**desired future condition** - An expression of resource goals that have been set for a unit of land. It is written as a narrative description of the landscape as it will appear when the goals have been achieved. The condition also includes a description of physical and biological processes, the environmental setting, and the human experience.

**Development Level** - An indication of site modification based on classes in the Recreation Opportunity Spectrum. Development Level 1 equates to Primitive, with minimum site modification; 2 equates to Semi-Primitive Motorized/Nonmotorized, with little site modification; 3 equates to Roaded, with moderate modification; 4 equates to Rural, with heavy site modification; and 5 relates to Urban, with a high degree of site modification.

**developed recreation** - Recreation use or opportunities occurring at developed sites.

**developed recreation site** - A discrete place containing a concentration of facilities and services used to provide recreation opportunities to the public and evidencing a significant investment in facilities and management under the direction of an administrative unit in the National Forest System.

**diameter at breast height** - A tree's diameter measured at about 4.5 feet (1.37m) above the forest floor on the uphill side of the tree. For the purposes of determining breast height, the forest floor includes the duff layer that may be present, but does not include unincorporated woody debris that may rise above the ground line.

**diameter class** - Any of the intervals into which a range of diameters of tree stems may be divided for classification and use, (e.g., 10-inch class includes diameters from 9.5 inches to 10.49 inches.

**dispersed recreation** - Recreation opportunities or use occurring in the general forest area. Does not take place in developed sites.

**disturbance (ecology)** - Any relative discrete event in time that disrupts the ecosystem, community, or population structure and changes resources, substrate availability, or the physical environment.

**disturbance-recovery regime** - A natural pattern of periodic disturbance followed by a period of recovery. Examples include fire or flooding.

**diversity** - The distribution and abundance of different plant and animal communities and species within the area covered by a land and resource management plan.

**drainage area/basin** - The total area above a given point on a stream that contributes to the flow at that point. Term is often used interchangeably with watershed.

**drum chopping** - Method used to prepare areas for reforestation. Large drums with cutting blades attached are pulled over areas by vehicles that include crawler-type tractors and rubber-tired skidders.

## **E**

**early succession forest** - The biotic community that develops immediately following the removal or mortality of most or all forest canopy, resulting in a predominance of woody species regeneration. As used in the Environmental Impact Statement and the Forest Plan, a stand age of 0 to 10 years defines this condition. See successional stage.

**early-successional habitat** - A vegetative condition typically characterized by low density to no tree canopy cover and an abundance of herbaceous and/or woody ground cover. This condition may include early-successional forest, maintained openings, pastures, and open woodlands.

**early successional species** - Plant or animal species characteristic of early forest successional stages.

**ecological classification system** - A hierarchical system used to help organize and coordinate the classification of ecological types, units, and to make comparisons. Classification is ecologically based and integrates existing resource data including climate, topography, geology, soil, hydrology, and vegetation. The system includes many levels (from the top-down approach): domain, division, province, section, subsection, land type, land type association, land type phase, and site.

**ecological management unit** - A grouping of one or more soil series that have similar characteristics including texture, structure, or water retention capacity. EMUs are used in soil mapping.

**ecosystem** - A complete interacting system of organisms and their environment.

**ecosystem/cover type** - The native vegetation ecological community considered together with non-living factors of the environment as a unit. The general cover type occupying the greatest percent of the stand location. Based on tree or plant species forming a plurality of the stocking within the stand. May be observed in the field, or computed from plot measurements.

**electronic sites** - Areas designated for the operation of equipment which transmits and receives radio signals.

**endangered species** - Any species that is in danger of extinction throughout all or a significant portion of its range, other than members of the class Insecta that have been determined by the Department of Interior to constitute a pest whose protection under the provisions of this (Endangered Species Act of 1973) act would present an overwhelming and overriding risk to humans. It must be designated in the *Federal Register* by the appropriate secretary.

**Endangered Species Act of 1973** - An act that enables endangered and threatened species to be conserved. It provides a program for the conservation of such species, and takes appropriate steps to achieve the purposes of the (relevant) treaties and conventions.

**endemic** - Species restricted to a particular geographic area. Usually limited to one or a few small streams or a single drainage.

**ending inventory** - The standing volume at the end of the planning horizon. It must be adequate for the maintenance of long-term sustained yield.

**environment** - All the conditions, circumstances, and influences surrounding and affecting the development of an organism, or group of organisms.

**environmental consequence** - The result or effect of an action upon the environment.

**Environmental Impact Statement** - A disclosure document revealing the environmental effects of a proposed action, which is required for major federal actions under Section 102 of the National Environmental Policy Act, and released to the public and other agencies for comment and review. Final Environmental Impact Statement (FEIS) is the final version of the statement disclosing environmental effects required for major federal actions under Section 102 of the National Environmental Policy Act.

**environmental impact** - Used interchangeably with environmental consequence or effect.

**ephemeral streams** - Streams having flows that occur for short periods of time in direct response to storm precipitation or snowmelt runoff. Their bottoms are always above the water table and do not contain fish or aquatic insects that have larvae with multiple-year life cycles. Ephemeral streams may have a defined channel, but may be manifested as a natural swale or depression with vegetation and organic material covering the bottom. They also may serve as a conduit for much of the sediment that enters the stream system. Large woody debris associated with ephemeral streams may also contribute significantly to the stability of a stream system. Ephemeral streams that exhibit an ordinary high watermark, show signs of annual scour or sediment transport, are considered navigable waters of the United States.

**erosion** - The wearing away of the land surface by the action of wind, water, or gravity.

**essential habitat** - Habitat in which threatened and endangered species occur, but which has not been declared as critical habitat. Occupied habitat or suitable unoccupied habitat necessary for the protection and recovery of a federally designated threatened or endangered species.

**eutrophication** – Condition of a lake where deleterious effects are caused by increased nutrients (nitrogen and phosphorous), and a decrease in oxygen.

**evapo-transpiration** - The transfer of water vapor to the atmosphere from soil and water surfaces (evaporation), and from living plant cells (transpiration).

**even-aged methods** – Regeneration methods designed to maintain and regenerate a stand with a single age class.

**even-aged silvicultural system** - A planned sequence of treatments designed to maintain and regenerate a stand with one age class.

**even-aged stand** - A stand of trees containing a single age class in which the range of tree ages is usually less than 20 percent of rotation.

**Existing Old Growth** - Individual stands currently recognized by the FS as meeting the parameters for existing old growth as described in the "Guidance for Conserving and Restoring Old-Growth Forest Communities on National Forests in the Southern Region".

**extirpation** – Extinction of a species from all or part of its range.

## **F**

**farmer-owned land** - Owned by farm operators, excluding incorporated farm ownerships.

**featured species** - The selected wildlife species whose habitat requirements guide wildlife management including coordination, multiple use planning, direct habitat improvements, and cooperative programs for a unit of land. In context of land management planning, featured species are similar to management indicator species.

**Federal Register** - The designated document that notifies the public of federal actions and includes Notice of Intent, calls for public involvement, etc. It also publishes the regulations needed to implement those federal actions.

**felling** – The cutting down of trees.

**final crop** – That portion of the growing stock (to be) kept until final commercial harvest, (i.e., final product objective).

**fire condition class** – Based on coarse scale national data, classes measure general wildfire risk:

**Class One** – Fire regimes are usually within historical ranges. Vegetation composition and structure are intact. The risk of losing key ecosystem components from the occurrence of fire is relatively low.

**Class Two** – Fire regimes on these lands have been moderately altered from their historical range by increased or decreased fire frequency. A moderate risk of losing key ecosystem components has been identified.

**Class Three** – Fire regimes on these lands have been significantly altered from their historical return interval. The risk of losing key ecosystem components from fire is high. Fire frequencies have departed from historical ranges by multiple return intervals. Vegetation composition, structure and diversity have been significantly altered.

**fire management effectiveness index** - A measure of the effectiveness of annual fire management operational programs. Measured in dollars per thousand acres protected, the objective is to minimize the index value.

**fire management plan** – Strategic plans that define a program to manage wildland fires based on an area's approved land management plan. They must address a full range of fire management activities that support ecosystem sustainability, values to be protected, protection of firefighter and public safety, public health and environmental issues, and must be consistent with resource management objectives and activities of the area.

**fire regime** – A generalized description of the role a fire plays in the ecosystem. It is characterized by fire frequency, predictability, seasonality, intensity, duration, scale (patch size), and regularity or variability. Five combinations of fire frequency exist.

Groups One and Two include fire return intervals in the 0-35 range. One includes Ponderosa Pine, other long needle pine species, and dry site Douglas Fir. Group Two includes the drier grassland types - tall grass prairie, and some Pacific chaparral ecosystems.

Groups Three and Four include fire return intervals in the 35-100+ year range. Three includes interior dry site shrub communities including sagebrush and chaparral ecosystems. Group Four includes Lodgepole and Jack Pine.

Group Five is the long interval (infrequent), stand replacement fire regime and includes temperate rain forest, boreal forest, and high elevation conifer species.

**fire use** – The combination of wildland fire use and prescribed fire application to meet resource objectives.

**fisheries classification** - Water bodies and streams are classified as having cold, cool or warm water fishery.

**fisheries habitat** - Streams, lakes, and reservoirs that support fish.

**floodplains** - Lowland or relatively flat areas joining inland and coastal water including, at a minimum, that area subject to a 1-percent (100-year return period) or greater chance of flooding in any given year. Although floodplains and wetlands fall within the riparian area, they are defined here separately as described in the Forest Service Manual.

**floor on first period production** - The minimum harvest volume in the first period that should be produced to prevent a significant impact on the local economy.

**forage** - All browse and non-woody plants that are available to livestock or game animals used for grazing or harvested for feeding.

**forage production** - The weight of forage that is produced within a designated period of time on a given area. The weight may be expressed as green, air dry, or oven dry. The term may also be modified as to time of production including annual, current years, or seasonal forage production.

**foreground** - The area between the viewer and the middle ground in a landscape; generally from 0 to ½ mile distance.

**forest** - An area managed for the production of timber and other forest products, or maintained under woody vegetation for indirect benefits as protection of a watershed, recreation, or wildlife habitat.

**forest type** - A category of forest defined by its vegetation (particularly its dominant composition) as based on a percentage cover of trees.

**forest development road** - A road wholly or partly within, or adjacent to, and serving a part of the National Forest System. It also has been included in the Forest Development Road System Plan.

**forest health** – The perceived condition of a forest derived from concerns about factors as its age, structure, composition, function, vigor, presence of unusual levels of insects or disease, and resilience to disturbance.

**forest land** - Land at least 10 percent occupied by forest trees of any size, or formerly having had such tree cover, and not currently developed for non-forest use. Lands developed for non-forest use including areas for crops, improved pasture, residential, or administrative areas, improved roads of any width, adjoining road clearing, and power line clearing of any width.

**Forest and Rangeland Renewable Resources Planning Act of 1974** - An act of Congress requiring the preparation of a program for the management of the national forests' renewable resources, and of land and resource management plans for units of the National Forest System. It also requires a continuing inventory of all National Forest System lands and renewable resources.

**Forest Service Handbook (FSH)** - A handbook that provides detailed instructions for proceeding with specialized phases of programs or activities for Forest Service use.

**Forest Service Manual (FSM)** - Agency manuals that provide direction for Forest Service activities.

**forest trail system** - Trails that are part of the forest transportation system. A designated path commonly used and maintained for hikers, horse riders, bicycles, or two-wheeled motorized vehicles.

**forest type** - A descriptive term used to group stands of similar composition and development because of given ecological factors, by which they may be differentiated from other groups of stands.

**forest supervisor** - The official responsible for administering the National Forest System lands in a Forest Service administrative unit. It may consist of two or more national forests or all the forests within a state. The supervisor reports to the regional forester.

**forest-wide standard** - A performance criterion indicating acceptable norms, specification, or quality that actions must meet to maintain the minimum considerations for a particular resource. This type of standard applies to all areas of the forest regardless of the other management prescriptions applied.

**free-to-grow** - A seedling or small tree free from direct competition from other trees, shrubs, grasses, or herbaceous plants.

**fuel break** - Any natural or constructed barrier used to segregate, stop, and control the spread of fire, or to provide a control line from which to work.

**fuel treatment** - The rearrangement or disposal of fuels to reduce fire hazard. Fuels are defined as living and dead vegetative materials consumable by fire.

**fuels management** - The planned treatment of fuels to achieve or maintain desired fuels conditions.

**fuelwood** - Wood used for conversion to some form of energy.

**Future Old Growth** - Areas on the Forest where development of old growth conditions are most likely to occur, based on the intent of the assigned management prescription.

## **G**

**game species** - Any species of wildlife or fish for which seasons and bag limits have been prescribed, and which are normally harvested by hunters, trappers, and fishermen under state or federal laws, codes, and regulations.

**General Forest Area** - National forest lands not categorized as developed recreation sites, trails or wilderness. It can be a logical working area, (i.e., a drainage, geographic area, forest district, etc.) Typically containing a wide spectrum of settings and opportunities, facilities and sites located inside the boundary of a GFA are sometimes considered *concentrated use areas* (CUA), that may include dispersed



front- and/or backcountry campsites, parking areas, pullouts and landings, river and road corridors, lake surfaces, and day use areas including OHV areas, climbing areas, target shooting areas, etc. Amenities or constructed features inside GFAs are primarily for resource protection.

**geologic features** - Landforms or other features of significant geologic interest that may require special management to protect the special qualities, or provide interpretation to the public.

**geologic formation** - A mappable body of rock identified by distinctive characteristics, some degree of internal homogeneity, and stratigraphic position. The name normally consists of two parts. The first is the name of the geographic locality where the formation was first identified and described. This is followed by a descriptive geologic term, usually the dominant rock type.

**Geographic Information System** - An information processing technology to input, store, manipulate, analyze, and display spatial resource data to support the decision-making processes of an organization. Generally, an electronic medium for processing map information, typically used with manual processes to affect specific decisions about land base and its resources.

**geological area** - A unit of land that has been designated by the Forest Service as containing outstanding formations or unique geological features of the earth's development, including caves and fossils. Areas of this type and all other special interest areas are identified and formally classified primarily because of their recreational and educational values. Areas with similar types of values of scientific importance are formally classified as research natural areas.

**global ranks** - Ranks assigned by the Nature Conservancy and state heritage programs based on number of occurrences.

**grassland** - Areas on which vegetation is dominated by grasses, grass-like plants, forbs, and/or cryptogams (mosses, lichens, and ferns), provided these areas do not qualify as built-up land or cultivated cropland. Examples include tall grass and short grass prairies, meadows, cordgrass marshes, sphagnum moss areas, pasturelands, and areas cut for hay.

**grazing** - Consumption of range or pasture forage by animals.

**grazing capacity** - The maximum stocking rate possible without inducing damage to vegetation or related resources.

**grazing permit** - Official, written permission to graze a specified number, kind, and class of livestock for a specific period on a defined range allotment.

**gross receipts** - A total of all funds received by the U.S. Treasury as a result of Forest Service activities.

**groundwater** - Water in a saturated zone in a geologic stratum. Water stored below the water table where the soil (or other geologic material) is saturated.

**group selection** – An uneven-aged regeneration method in which trees are removed periodically in small groups. Uneven age classes for trees are established in small groups. The width of groups is about twice the height of the mature trees, with small opening providing microenvironments suitable for tolerant regeneration, and the larger openings providing conditions suitable for more intolerant regeneration.

**growing stock trees** - Live trees, meeting specified standards of quality or vigor, included in growth and yield projections to arrive at the allowable sale quantity.

**growing stock volume** - Volume (cubic feet) of solid wood in growing stock trees 5 inches DBH and larger, from a 1-foot stump to a minimum 4-inch top diameter, outside bark, on the central stem. Volume of solid wood in primary forks from the point of occurrence to a minimum 4-inch top diameter outside bark is included.

## **H**

**habitat** - The native environment of an animal or plant.

**harvest cutting** – An intermediate for final cutting that extracts salable trees.

**harvesting method** - A procedure by which a stand is logged. Emphasis is on meeting logging requirements rather than silvicultural objectives.

**herbicide** – A pesticide used for killing or controlling the growth of undesirable plants.

**high-grading** - The removal from the most commercially valuable trees, often leaving a residual stand composed of trees of poor condition or species composition.

**historic landscapes** - Industrial, agricultural, pastoral or domestic landscapes that have evolved over many years from human alteration. Commonly functional and often vernacular, the landscapes may not always be visually pleasing, often responding to specific functions or topography, not formally planned or designed. They may be informal to the degree that they appear to be natural occurrences, or the spatial organization of built and natural elements may be quite traditional or formal. They are identifiable and can be mapped, either as point-specific features or enclaves within a larger landscape, as entire landscapes themselves, or as a combination of both.

**human resource programs** - Any of the federal labor programs providing work experience for local people.

**hydric soils** – Soils developed in conditions where soil oxygen is limited by the presence of saturated soil for long periods during the growing season.



**Immediate Foreground-** The area in the landscape from the viewer out to 300 feet distance.

**improved pasture** - Fenced, fertilized pastures intensively managed for livestock grazing.

**improvement cutting** – The removal of less desirable trees in a stand of poles or larger trees, primarily to improve composition and quality.

**industrial fuelwood** - Wood to be used specifically by industry for production of energy.

**industrial wood** - All commercial round wood products, except fuelwood.

**infestation** – The attack by macroscopic organisms in considerable concentration. Examples are infestations of tree crowns by budworm, timber by termites, soil or other substrates by nematodes or weeds.

**INFRA Infrastructure** - An integrated database for collection/storage/use of information about features, land units, facilities and utilities, accessibility and real property. For recreation management, INFRA holds information on O&M costs, recreation funding shortfalls, recreation use data, information on accessibility, and inventories of facilities. INFRA brings together Oracle, Arc Info and Arc View GIS technology, and supplements recreation management systems including SMS, ROS and Benefits Based Management.

**initial attack** – The aggressive response to a wildland fire based on values to be protected, benefits of response, and reasonable cost of response.

**in-stream flow** - The presence of adequate stream flow in channels necessary to maintain the integrity of the stream channel, and protection of downstream beneficial uses including fish and wildlife needs, outdoor recreation uses of water, and livestock watering needs.

**integrated pest management (IPM)** – The maintenance of destructive agents, including insects at tolerable levels, by the planned use of a variety of preventive, suppressive, or regulatory tactics and strategies that are ecologically and economically efficient and socially acceptable.

**Interdisciplinary Team** - A group of resource specialists (e.g.: forester, wildlife biologist, hydrologist, etc.) responsible for developing the Forest Plan/Environmental Statement, and for making recommendations to the forest supervisor.

**intermediate treatments** - A collective term for any treatment designed to enhance growth, quality, vigor, and composition of the stand after establishment of regeneration and prior to final harvest.

**intermittent streams** – Streams that flow in response to a seasonally-fluctuating water table in a well-defined channel. The channel will exhibit signs of annual scour, sediment transport, and other stream channel characteristics, absent perennial flows. Intermittent streams typically flow during times of elevated water table levels, and may be dry during significant periods of the year, depending on precipitation cycles.

**interpretive association** - A nonprofit, tax-exempt corporation or organization whose purpose is extending and enhancing the ability of the Forest Service to provide customer service to National Forest visitors. They work cooperatively with the Forest Service in educating the public about natural and cultural issues on public lands.

**interpretive services** - Visitor information services designed to present inspirational, educational, and recreational values to forest visitors in an effort to promote understanding, appreciation, and enjoyment of their forest experience.

**intolerant** – A plant requiring sunlight and exposure for establishment and growth.

## **L**

**land exchange** - The conveyance of non-federal land or interests in the land in exchange for National Forest System land or interests in land.

**landing** – A cleared area in the forest to which logs are yarded or skidded for loading onto trucks for transport.

**landline location** - Legal identification and accurate location of national forest property boundaries.

**land management planning** – A formal process of management planning involving four interactive steps: monitoring, assessment, decision making, and implementations as described in the Federal Code of Regulations.

**landscape** - An area composed of interacting ecosystems that are repeated because of geology, land form, soils, climate, biota, and human influences throughout the area. Landscapes are generally of a size, shape, and pattern that are determined by interacting ecosystems.

**landscape character** - Particular attributes, qualities, and traits of landscape that give it an image and make it identifiable or unique.

**landtype** - An intermediate level in the ecological classification system hierarchy that addresses land areas ranging in size from hundreds of acres up to ten thousands of acres. These units typically have similarities in landform, natural vegetative communities, and soils.

**landtype association** - A group of landtypes. The landtypes in the association are sufficiently homogeneous to be considered as a whole for modeling the future outputs and effects of planned management activities. Landtype associations may

not follow watershed boundaries, and are defined on the basis of general similarities in climate, geology, landform, and vegetation.

**landtype phase** - The most detailed level in the ecological classification system hierarchy that addresses local geology, soils, streams, and vegetation types. Land areas are generally less than 100 acres in size.

**large woody debris (LWD) (coarse woody debris) (CWD)** – Any piece(s) of dead woody material, e.g., dead boles, limbs, and large root masses, on the ground in forest stands, or in streams.

**late-seral (successional) stage** - The stage of forest development at which overstory trees have attained most of expected height growth and have reached ecological maturity. As used in the Environmental Impact Statement and the Forest Plan, this successional stage is generally defined by stand ages greater than 80 years for most hardwood types, and by stand ages greater than 60 years for most pine types. Old-growth forests occur during the later periods of this seral stage at ages that vary by forest type and in response to a variety of environmental conditions. See successional stage.

**lease** - A contract between the landowner and another granting the latter the right to search for and produce oil, gas, or other mineral substances (as specified in the document) on payment of an agreed rental, bonus, or royalty. This right is subject to the terms, conditions, and limitations specified in the document.

**leave tree** – A tree (marked to be) left standing for wildlife, seed production, etc, in an area where it might otherwise be felled.

**Limits Of Acceptable Change (LAC)** - A planning process used to establish acceptable wilderness resource and social conditions and prescribe appropriate management actions.

**local road** - Roads that connect terminal facilities with forest collector or forest arterial roads, or public highways. Forest local roads may be developed and operated for either long- or short-term service. These roads are generally single lane.

**logging** - The felling, skidding, on-site processing, and loading of trees or logs onto trucks.

**long-term facilities** - Facilities that are developed and operated for long-term land management and resource utilization needs. They may be operated for constant or intermittent service.

1. **constant service** - Facilities developed and operated for continuous or annual recurrent service.
2. **intermittent service** - Facilities developed and operated for periodic service and closed for more than one year between periods of use. Closure is by means other than a gate.

**long-term sustained-yield capacity** - The highest uniform wood yield from lands being managed for timber production that may be sustained under a specified management intensity, consistent with multiple-use objectives.

**low PSI skidder** - A term used to identify any one of several types of vehicles used to move logs from stump to log loading area. Low PSI (pounds per square inch) identifies those vehicles that, because of design of tracks, wheels, or suspension system, exert much lower pressure on ground surface than other types of ground-based skidding vehicles.

## **M**

**machine planting** - A method by which tree seedlings are planted by mechanical means rather than by hand.

**management action** - A set of management activities applied to a land area to produce a desired output.

**management action controls** - Specifies the acreage or the proportion of an analysis unit assigned to a set of management actions. The controls can be specified in terms of greater than or equal to, equal to, or less than equal to some amount, or proportion of the analysis unit acreage.

**management area** - A selected grouping of capability or analysis areas selected through evaluation procedures used to locate decisions, and resolve issues and concerns. An area with similar management objectives, and a common management prescription.

**Management Attainment Report (MAR)** - A process used in determining whether work is progressing as planned. It provides the manager with information for measuring progress against objectives, information for measuring self and subordinates' performance, and an indication of a reporting unit's performance.

**management concern** - An issue, problem, or condition which constrains the range of management practices identified by the Forest Service in the planning process.

**management direction** - A statement of multiple-use and other goals and objectives. The associated management prescriptions, and standards and guidelines for attaining them.

**management emphasis** - The multiple-use values to be featured or enhanced.

**management indicator species** - A particular type of plant or animal whose presence in a certain location or situation is a sign or symptom that particular environmental conditions are also present. Any species, group of species, or species habitat element selected to focus management attention for the purpose of resource production, population recovery, maintenance of population viability, or ecosystem diversity.

**management intensity** - A management practice or combination of management practices and associated costs designed to obtain different levels of goods and services.

**management opportunity** - A statement of general actions, measures, or treatments that address a public issue or management concern in a favorable way.

**management practice** - A specific action, measure, course of action, or treatment undertaken on a forest.

**management prescription** - Management practices and intensity selected and scheduled for application on a specific area to attain multiple-use and other goals and objectives.

**management situation** - A comprehensive statement of the planning area resources, its history as it may influence planning, past and present uses, and a review of the public issue directly concerned with the area.

**management team** - A decision-making group consisting of the forest supervisor, staff officers, and district rangers.

**management type** - The tree species or species group that should be grown on a specific site, whether or not it presently occupies the site that best suits the particular site soil, aspect, elevation, and moisture provided by the area and the forest plan's objectives.

**mast tree** - Generally hardwood trees of the heavy seeded variety including oaks, hickories, walnut, beech—25 years and older capable of producing frequent seed crops to feed a variety of wildlife species.

**mature timber** - The stage at which a crop or stand of trees best fulfills the main purpose for which it was grown.

**maximum modification** - A visual quality objective in which man's activity may dominate the characteristic landscape, but should appear as a natural occurrence when viewed as background.

**mean annual increment of growth** - The total increase in girth, diameter, basal area, height, or volume of individual trees or a stand up to a given age divided by that age.

**mechanical site preparation** - Soil disturbance by mechanical chopping, furrowing, dozing, or disking to prepare areas for reforestation. Objective is to reduce plant competition for trees to be planted.

**mesic** - Sites or habitats characterized by intermediate moisture conditions, i.e., neither decidedly wet or dry.

**middle ground** - The space between the foreground and the background in a picture or landscape; generally ½ mile to 4 miles distance from the viewer.

**mid-seral (successional) stage** – The stage of forest development during which distinct overstory, midstory, and understory canopies are developed. As used in the Environmental Impact Statement and the Forest Plan, this successional stage is generally defined as stand ages of 41-80 years for most hardwood types, and as stand ages of 21-60 years for most pine types. See successional stage.

**mineral exploration** - The search for valuable minerals on lands open to mineral entry.

**mineral soil** - Weathered rock materials without any vegetative cover.

**mineral resource** - A known or undiscovered concentration of naturally occurring solid, liquid, or gaseous material in or on the earth's crust in such form and amount that economic extraction of a commodity from the concentration is currently or potentially feasible.

**minerals (leasable)** - Coal, oil, gas, phosphate, sodium, potassium, oil shale, sulphur, and geothermal steam. All hard-rock minerals that occur on acquired lands, as opposed to public domain lands, are leasable.

**minerals (salable)** - Common variety deposits that—although they may have value or use in trade, manufacture, the sciences, or in the mechanical or ornamental arts—do not possess a distinct, special economic value for such use over and above the normal uses of the general sum of such deposits. These may include sand, stone, gravel, pumicite, cinders, pumice (except that occurring in pieces more than two inches on a side), clay, and petrified wood.

**minimum management requirement** - Any constraint imposed to comply with 36 CFR 219.27 and other legal restrictions that must be met by benchmark solutions as noted in 36 CFR 219.11(e)(1). These include requirements including conserving soil productivity, maintaining minimum viable populations of wildlife, preserving the habitat of endangered species' habitat, dispersing openings, and limiting cut size. It also includes any other standards and guidelines, including best management practices that serve to define management prescriptions and resource response.

**mitigation** - Actions to avoid, minimize, reduce, eliminate, or rectify the impact of a management practice.

**monitoring** - The periodic evaluation on a sample basis of Forest Plan management practices to determine how fully objectives have been met, and how closely management standards have been applied.

**montane** – Relating to the zone of relatively moist, cool upland ;slopes characterized by the presence of large evergreen trees as a dominant life form.

**mortality** - Dead or dying trees resulting from forest fire, insect, diseases, or climatic factors.

**motorized equipment** - Machines that use a motor, engine, or other non-living power source. This includes, but is not limited to such machines as chain saws,



aircraft, snowmobiles, generators, motor boats, and motor vehicles. It does not include small battery or gas powered hand carried devices that include+ shavers, wristwatches, flashlights, cameras, stoves, or other similar small equipment.

**multiple use** - The management of all the various renewable surface resources of the National Forest System so that they are used in a manner that will best meet the needs of the American people. Making the most judicious use of the land for these resources or related services over areas large enough to provide sufficient latitude for periodic adjustments in the use to conform to changing needs and conditions.

**multipliers** - The ratio of a total impact to a component of the impact in input/output analysis. An example would be the ratio of the sum of direct, indirect, and induced impacts to direct impacts.

## **N**

**National Environmental Policy Act (NEPA) of 1969** - An act to declare a national policy that will encourage productive and enjoyable harmony between humankind and the environment. It was created to promote efforts that will prevent or eliminate damage to the environment, biosphere, and stimulate the health and welfare of humanity. In addition, the act was crafted to enrich the understanding of the ecological systems and natural resources important to the nation, and establish a Council of Environmental Quality.

**National Forest Land and Resource Management Plan (Forest Plan)** - A plan developed to meet the requirements of the Forest and Rangeland Renewable Resources Planning Act of 1974, as amended, that guides all natural resource management activities and establishes management standards and guidelines for the National Forest System lands of a given national forest.

**National Forest Management Act (NFMA) of 1976** - Act passed as an amendment to the Forest and Rangeland Renewable Resources Planning Act, requiring the preparation of regional guides and forest plans, and the preparation of regulations to guide them.

**National Forest System (NFS)** - All national forest lands reserved or withdrawn from public domain of the United States and acquired through purchase, exchange, donation, or other means. National Grasslands and land utilization projects administered under Title III of the Bankhead-Jones Farm Tenant Act (50 Stat. 525, 7 U.S.C. 1010-1012), and other lands, waters, or interests that are administered by the Forest Service, or are designated for administration through the Forest Service as a part of the system.

**National Forest System Land** - Federal land that has been legally designated as national forests or purchase units, and other land under the administration of the Forest Service, including experimental areas and Bankhead-Jones Title III land.

**National Recreation Trails** - Trails designated by the Secretary of the Interior or the Secretary of Agriculture as part of the national system of trails authorized by the

National Trails System Act. National recreation trails provide a variety of outdoor recreation uses, in or reasonably accessible, to urban areas.

**National Register of Historic Places** - The National Register of Historic Places is the Nation's official list of cultural resources worthy of preservation. Authorized under the National Historic Preservation Act of 1966, the National Register is part of a national program to coordinate and support public and private efforts to identify, evaluate, and protect our historic and archeological resources. Properties listed in the Register include districts, sites, buildings, structures, and objects that are significant in American history, architecture, archeology, engineering, and culture. The National Register is administered by the National Park Service, which is part of the U.S. Department of the Interior.

**National Visitor Use Monitoring (NVUM)** - A systematic process to estimate annual recreation and other uses of National Forest lands through user surveys.

**National Wild and Scenic Rivers System** - Rivers with scenic, recreational, geologic, fish and wildlife, historic, cultural, or other similar values designated by Congress under the Wild and Scenic Rivers Act of Oct. 2, 1968, for preservation of their free-flowing condition.

**National Wilderness Preservation System** - All lands covered by the Wilderness Act and subsequent wilderness designations, irrespective of the department or agency having jurisdiction.

**natural regeneration** - An age class created from natural seeding, sprouting, suckering, or layering.

**net annual growth** - The net change in merchantable volume expressed as an annual average between surveys in the absence of cutting (gross growth minus mortality).

**net public benefits** - An expression used to signify the overall long-term value to the nation of all outputs and positive effects (benefits) less all associated inputs and negative effects (costs) whether they can be quantitatively valued. Net public benefits are measured by quantitative and qualitative criteria rather than a single measure or index. The maximization of net public benefits to be derived from management of units of the National Forest System is consistent with the principles of multiple use and sustained yield.

**no-action alternative** - The most likely condition expected to exist in the future if current management direction would continue unchanged.

**non-chargable volume** - All volume not included in the growth and yield projections for the selected management prescriptions used to arrive at the allowable sale quantity.

**non-commodity output** - A resource output that cannot be bought and sold.

**non-declining yield** - A level of timber production planned so that the planned sale and harvest for any future decade is equal to, or greater than the planned sale and harvest for the preceding decade.

**non-forest land** - Land that has never supported forests and lands formerly forested where use for timber utilization is precluded by development for other use. Lands that never have had, or that are incapable of having 10 percent or more of the area occupied by forest trees; or lands previously having such cover and currently developed for non-forest use.

**non-game species** - Any species of wildlife or fish which is ordinarily not managed or otherwise controlled by hunting, fishing, or trapping regulations. The designation may vary by state.

**non-point source pollution** - A diffuse source of pollution not regulated as a point source. May include atmospheric, deposition, agricultural runoff, and sediment from land-distributing activities.

**non-stocked stands** - Stands less than 16.7 percent stocked with growing stock trees.

**non-timber forest products** - All forest products except timber, including resins, oils, leaves, bark, plants other than trees, fungi, and animals or animal products.

**No Surface Occupancy (NSO)** - Use or occupancy of the land surface for mineral development is prohibited to protect identified resource values



**objective** - A concise, time-specific statement of measurable planned results that respond to pre-established goals. It forms the basis for further planning to define the precise steps to be taken and the resources to be used in achieving identified goals.

**Off-Highway Vehicle (OHV)** - Any vehicle capable of being operated off established roads; e.g., ATVs, motorbikes, four-wheel drives, and snowmobiles. (Also referred to as OHV or off-highway vehicle).

**off-road vehicle (ORV)** - Any motorized vehicle designed for or capable of cross county travel on or immediately over land, water, sand, snow, ice, marsh, swampland, or other natural terrain; except that term excludes (A) any registered motorboat; (B) any fire, military, emergency or law enforcement vehicle when used for emergency purposes, and any combat or combat support vehicle when used for national defense purposes; and (C) any vehicle whose use is expressly authorized by the respective agency head under a permit, lease, license, or contract.

**offstream use** - Water withdrawn or diverted from a ground or surface-water source for public water supply, industry, irrigation, livestock, thermoelectric power generation, and other uses.

**old growth forests** – An ecosystem distinguished by old trees and related structural attributes. Old growth encompasses the later stages of stand development that typically differ from earlier stages in a variety of characteristics including tree size, accumulation of large dead woody material, number of canopy layers, species composition, and ecosystem function. Old growth is not necessarily virgin or primeval. It can develop over time following human disturbances, just as it does following natural disturbances. Old growth encompasses older forests dominated by early seral species, and forests in later successional stages dominated by shade tolerant species.

**on-site** - A term referring to species normally found on a site under natural conditions. The same or contiguous property that may be divided by a public or private right-of-way, provided that the entrance and exit between the properties is at a crossroads intersection, and that access is by crossing, as opposed to going along the right-of-way.

**operating plan** - A written plan, prepared by those engaged in mining activity on the forests, and approved by a forest officer for prospecting, exploration, or extraction activities that are slated to take place on National Forest System land.

**ordinary high water mark** - The line on the shore established by the fluctuation of water, and is indicated by physical characteristics including a clear, natural line impressed on the bank; shelving, changes in the character of soil, destruction of terrestrial vegetation, the presence of litter, debris, or other appropriate means that consider the characteristics of the surrounding area.

**output** - The goods, end products, or services that are purchased, consumed, or used directly by people. Goods, services, products, and concerns produced by activities that are measurable and capable of being used to determine the effectiveness of programs and activities in meeting objectives. A broad term for describing any result, product, or service that a process or activity actually produces.

**output, minimum level** - The amount of an output that will occur regardless of management activity.

**outstanding mineral rights** - Instances in which the minerals in federally- owned lands were severed prior to the transaction in which government acquired the land. Such rights are not subject to the Secretary of Agriculture's rules and regulations. Removal or extraction of these minerals must be allowed in accordance with the instrument severing the minerals from the surface and under applicable state and local laws and regulations.

**overstory** - That portion of trees in a two- or multi-layered forest stand that provides the upper crown cover.

**overstory removal** - The cutting of trees comprising an upper canopy layer in order to release trees or other vegetation in an understory.

## **P**

**PAOT** - Persons-at-one-time; a measure of recreation carrying capacity, especially for developed sites. National conventions include 5 persons per family picnic/camp unit, 3.5 persons per parking lot stall at a trailhead or visitor center, 1.5 persons per motorcycle parking stall and 40 persons per tour bus parking stall.

**partial retention** - A visual quality objective which in human activities may be evident, but must remain subordinate to the characteristic landscape.

**partnership** - Voluntary, mutually beneficial and desired arrangement between the Forest Service and another or others to accomplish mutually agreed-on objectives consistent with the agency's mission and serving the public's interest.

**payments in lieu of taxes** - Payments to local or state governments based on ownership of federal land, and not directly dependent on production of outputs or receipt sharing.

**per capita use** - The average amount of water used person during a standard time period, generally per day.

**perennial stream** - Any watercourse that generally flows most of the year in a well-defined channel and is below the water table. Droughts and other precipitation patterns may influence the actual duration of flow. It contains fish or aquatic insects that have larvae with multi-year life cycles. Water-dependent vegetation is typically associated with perennial streams.

**person-year** - About 2,000 working hours that may be filled by one person working during the course of one year or several people working a total of 2,000 hours.

**petrographic** - The description and systematic classification of rocks.

**physiographic region** - A region of similar geologic structure and climate that has had a unified geomorphic history.

**planning area** - The area of the National Forest System covered by a regional guide or forest plan.

**planning criteria** - Standards, tests, rules, and guidelines by which the planning process is conducted, and upon which judgments and decisions are based.

**planning horizon** - The overall time period considered in the planning process that spans all activities covered in the analysis or plan. All future conditions and effects of proposed actions which would influence the planning decisions.

**planning period** - One decade. The time interval within the planning horizon that is used to show incremental changes in yields, costs, effects, and benefits.

**Possible Old Growth** - areas with the highest probability of being existing or future old growth based on the preliminary inventory criteria as described in the "Guidance

for Conserving and Restoring Old-Growth Forest Communities on National Forests in the Southern Region".

**Potential Natural Vegetation** - the biotic community that would become established if all successional sequences were completed without additional human interference under the present environmental conditions. Classifications of Potential Natural Vegetation are based on existing vegetation, successional relationships, and environmental factors (e.g., climate, geology, soil, natural disturbances, etc.) considered together.

**pre-commercial thinning** - The selective felling, deadening, or removal of tree in a young stand not for immediate financial return, but primarily to accelerate diameter increment on the remaining stems. To maintain a specific stocking or stand density range, or to improve the vigor and quality of the remaining trees.

**prescribed fire** - Any fire ignited by management actions to meet specific objectives including disposal of fuels, and controlling unwanted vegetation. The fires are conducted in accordance with prescribed fire plans, and are also designed to stimulate grasses, forbs, shrubs, or trees for range, wildlife, recreation, or timber management purposes.

**present net value** - The difference between the discounted value (benefits) of all outputs to which monetary values or established market prices are assigned and the total discounted costs of managing the planning area.

**preservation** - A visual quality objective that provides for ecological change only.

**presuppression** - Activities required in advance of fire occurrence to ensure effective suppression action, including: (1) recruiting and training fire forces, (2) planning and organizing attack methods, (3) procuring and maintaining fire equipment, and (4) maintaining structural improvements necessary for the fire program.

**primary trout stream** - Streams that contain naturally-reproducing populations of brook, rainbow, and/or brown trout.

**primitive road** - Roads constructed with no regard for grade control or designed drainage, sometimes by merely repeated driving over an area. These roads are single lane, usually with native surfacing and sometimes passable with four-wheel drive vehicles only, especially in wet weather.

**process records** - A system that records decisions and activities that result from the process of developing a forest plan, revision, or significant amendment.

**proclamation boundary** - The boundary contained within the presidential proclamation that established the national forest.

**productive deferred** - Productive (capable) forest land which has been legislatively designated or administratively designated by the Secretary of Agriculture or Chief of the Forest Service for wilderness study or possible additions to the Wilderness

System. This classification includes RARE II area designated as wilderness, but does not include RARE II areas designated as “further planning.”

**productivity class** - A classification of the capacity of a given piece of land for timber growth is expressed in cubic feet per acre a year.

**Class I** - Lands capable of producing 120 cubic feet or more per acre a year.

**Class II** - Lands capable of producing 85 to 119 cubic feet per acre a year.

**Class III** - Lands capable of producing 50 to 84 cubic feet per acre a year.

**Class IV** - Lands capable of producing 20 to 49 cubic feet per acre a year.

**program** - Sets of activities or projects with specific objectives, defined in terms of specific results and responsibilities for accomplishments.

**program budget** - The schedule of projects and activities to be carried out on the forest for a year for which funds have been appropriated.

**program development and budgeting** - The process by which activities for the forest are proposed and funded.

**project** - A work schedule prescribed for a project area to accomplish management prescriptions. An organized effort to achieve an objective identified by location, activities, outputs, effects, time period, and responsibilities for execution.

**proposed action** - In terms of the National Environmental Policy Act, the project, activity, or decision that a federal agency intends to implement or undertake. The proposed action described in the Environmental Impact Statement is the Forest Plan.

**proposed wilderness** – Areas recommended for wilderness by the Forest Service as a result of the RARE II study, but which have yet to be acted on by Congress.

**prospecting permit** - A written instrument or contract between the landowner and another conveying to the latter the right to enter the former's property and search for mineral materials. Two types of permits are used: (1) a BLM Prospecting Permit is issued by the Bureau of Land Management upon recommendation of the Forest Service. In most cases, these are preference right permits in which the prospector has the first opportunity, to the exclusion of all others, to lease any minerals discovered, and (2) a Forest Service Prospecting Permit issued by the Forest Service. No preference rights are conveyed under Forest Service permits, except in some cases of common varieties on acquired lands.

**public domain land** - Original holdings of the United States that were never granted or conveyed to other jurisdictions or reacquired by exchange for other public domain lands.

**public issue** - A subject or question of widespread public interest relating to management of the National Forest System.

**public participation activities** - Meetings, conferences, seminars, workshops, tours, written comments, survey questionnaires, and similar activities designed or held to obtain comments from the general public and specific publics.

**public roads** - Roads across national forest land which were in place as public ways when these lands were acquired. These roads may be a part of the forest, state, or county system, and may be maintained by any of these agencies.

**public supply** - Water withdrawn by public and private water suppliers and delivered to users.

**pulpwood** - Wood cut and prepared primarily for manufacture into wood pulp.

**pure stand** - A stand composed of essentially a single tree species, conventionally at least 85 percent based on numbers, basal areas, or volumes.

## **Q**

**qualifiers** - Measurable characteristics of outputs and activities. They characterize properties or attributes of activities or outputs.

## **R**

**raking** - A term used in land clearing whereby crawler tractors, or other types of similar heavy equipment, with a large rake device attached to the front end, are used to push clearing debris into piles or windrows.

**range allotment** - A designated area of land available for livestock grazing upon which a specified number and kind of livestock may be grazed under a range.

**range management** - The art and science of planning and directing range use to obtain sustained maximum animal production, consistent with perpetuation of the natural resources. Two types of range management are:

- 1. extensive** - To control livestock numbers within present capacity of the range, but little or no attempt is made to achieve uniform distribution of livestock. Range management investments are minimal and only to the extent needed to maintain stewardship of the range in the presence of grazing. Past resource damage is corrected and resources are protected from natural catastrophes.
- 2. intensive** - To maintain full plant vigor and to achieve full livestock utilization of available forage. This goal is achieved through implementation of improved grazing systems and construction and installation of range improvements. Cultural practices, (seeding and fertilizing), to improve forage quality and quantity may be used.

**ranger district** - Administrative subdivisions of the forest supervised by a District Ranger who reports to the Forest Supervisor.



**rare species** – Any native or once-native species of wild animal which exists in small numbers, and has been determined to need monitoring. May include peripheral species.

**real dollar value** - A monetary value, which compensates for the effects of inflation.

**receipt shares** - The portion of receipts derived from Forest Service resource management that is distributed to state and county governments, including the Forest Service, 25 percent fund payments.

**reconstruction** - Work that includes, but is not limited to, widening of roads, improving alignment, providing additional turnouts, and improving sight distance that improve the standard to which the road was originally constructed. Also undertaken to increase the capacity of the road or to provide greater traffic safety.

**Record of Decision** - A document separate from, but associated with an environmental impact statement that publicly and officially discloses the responsible official's decision on the alternative assessed in the environmental impact statement chosen to implement.

**recreation** - Leisure time activity including swimming, picnicking, camping, boating, hiking, hunting, and fishing.

**Recreation alignment** – To align or allocate the recreation resources (activities and opportunities) of an area with the niche and markets of the that area.

**Recreation Capacity** - A measure of the number of people a site can reasonably accommodate at one time; sometimes measured as PAOTs.

**Recreation Opportunity Spectrum** - A method for classifying types of recreation experiences available, or for specifying recreation experience objectives desired in certain areas. Classes are: Primitive, Semi-Primitive Non-Motorized, Semi-Primitive Motorized, Roaded Natural, Rural, and Urban.

- **Primitive ROS** An area characterized by having essentially unmodified natural environment of fairly large size. Interaction between users is very low and evidence of other users is minimal. The area is managed to be essentially free from evidence of human-induced restrictions and controls. Motorized use within the area is not permitted.

The recreation experience opportunity level provided would be characterized by the extremely high probability of experiencing isolation from the sights and sounds of humans, independence, closeness to nature, tranquility, and self-reliance through the application of woodsmen and outdoor skills in an environment that offers a high degree of challenge and risk.

- **Semi-Primitive Non-Motorized (ROS)** An area characterized by a predominantly natural or natural-appearing environment of moderate-to-large size. Interaction between users (or concentration of users) is low, but there is often evidence of other users. The area is managed in such a way that minimum

on-site controls and restrictions may be present but are subtle.

The recreation experience opportunity level provided would be characterized by the high, but not extremely high (or moderate) probability of experiencing isolation from the sights and sounds of humans, independence, closeness to nature, tranquility, and self-reliance through the application of woodsman and outdoor skills in an environment that offers challenge and risk. (The opportunity to have a high degree of interaction with the natural environment.) Motorized use is not permitted.

- **Semi-Primitive Motorized (ROS)** An area characterized by a predominantly natural or natural-appearing environment of moderate-to-large size. Interaction between users (or concentration of users) is low, but there is often evidence of other users. The area is managed in such a way that minimum on-site controls and restrictions may be present but are subtle.

The recreation experience opportunity level provided would be characterized by the high, but not extremely high (or moderate) probability of experiencing isolation from the sights and sounds of humans, independence, closeness to nature, tranquility, and self-reliance through the application of woodsman and outdoor skills in an environment that offers challenge and risk. (The opportunity to have a high degree of interaction with the natural environment.) Motorized use is permitted.

- **Roaded Natural (ROS)** An area characterized by predominantly natural-appearing environments with moderate evidences of the sights and sounds of man. Such evidences usually harmonize with the natural environment. Interaction between users may be low to moderate, but with evidence of other users prevalent. Resource modification and utilization practices are evident, but harmonize with the natural environment. Conventional motorized use is provided for in construction standards and design of facilities.

The recreation opportunity experience level provided would be characterized by the probability for equal experiencing of affiliation with individuals and groups and for isolation from sights and sounds of humans. Opportunities for both motorized and non-motorized forms of recreation may be provided.

- **Rural (ROS)** A classification for areas characterized by a substantially modified natural environment. Resource modification and utilization practices are to enhance specific recreation activities and to maintain vegetative cover and soil, but harmonize with the natural environment. A considerable number of facilities are designed for use by a large number of people. Moderate densities are provided away from developed sites. Facilities for intensified motorized use and parking are provided.

The recreation opportunity experience level provided would be characterized by the probability for experiencing affiliation with individuals and groups is prevalent, as is the convenience of sites and opportunities. These factors are generally more important than the setting. Opportunities for wildland challenge, risk taking, and testing of outdoor skills are generally unimportant.

- **Urban (ROS)** An area characterized by a substantially urbanized environment, although the background may have natural-appearing elements. Renewable resources modification and utilization practices are to enhance specific recreation activities. Vegetative cover is often exotic and manicured. Sights and sound of humans, on-site, are predominant. Large numbers of users can be expected, both on-site and in nearby areas. Facilities for highly intensified motor use and parking are available with forms of mass transit often available to carry people throughout the site.

The recreation opportunity experience level provided would be characterized by the probability for experiencing affiliation with individuals and groups is prevalent, as is the convenience of sites and opportunities. Experiencing natural environments, having challenges and risk afforded by the natural environment, and the use of outdoor skills are relatively unimportant. Opportunities for competitive and spectator sports and for passive uses of highly human-influenced parks and open spaces are common.

**Recreation Visit** - The entry of one person upon a National Forest to participate in recreation activities for an unspecified period of time. A NF visit can be composed of multiple site visits.

**reforestation** - The re-establishment of forest cover by seeding, planting, and natural means.

**regeneration** - The act of renewing of a tree crop by establishing young trees by naturally or artificially. The young crop itself.

**regeneration cutting** - Any removal of trees intended to assist regeneration already present or to make regeneration possible.

**regeneration (reproduction) method** - A cutting procedure by which a new age class is created. The major methods are clearcutting, seed-tree, shelterwood, selection, and coppice.

**regeneration (reproduction) period** - The time between the initial regeneration cutting and the successful re-establishment of a new age class by natural means, planting, or direct seeding.

**Region 8** - The states that make up the Southern Region of the USDA Forest Service.

**Regional Forester** - The official responsible for management of National Forest land within a USDA Forest Service region.

**regulated harvest** – Includes any volume scheduled in calculations of the allowable sale quantity which is harvested from suitable forest land.

**release and weeding** – A silvicultural treatment designed to free desirable trees from competition with overstory trees, less desirable trees, or grasses and other forms of vegetative growth. It includes release of natural and artificial regeneration.

**removal cut** - The cut which removes the last seed bearers of a seed tree or shelterwood regeneration method after the new seedling stand is considered to be established.

**research natural area** - An area set aside by the Forest Service specifically to preserve a representative sample of an ecological community, primarily for scientific and educational purposes. Commercial exploitation is not allowed and general public use is discouraged.

**reserve trees** - Trees, pole-sized or larger, retained after the regeneration period under the clearcutting, seed-tree, shelterwood, or coppice methods.

**reserved mineral rights** - Refers to those cases wherein the minerals were severed from the surface during the transaction whereby the government acquired the land. These rights are subject to the Secretary of Agriculture's rules and regulations that were applicable at the time of the transaction.

**resource** - An aspect of human environment which renders possible, or facilitates the satisfaction of, human wants, and the attainment of social objectives.

**resource allocation model** - A mathematical model using linear programming that will allocate land to prescriptions and schedule implementation of those prescriptions simultaneously. The end purpose of the model is to find a schedule and allocation that meets the goals of the forest and optimizes some objective function including minimizing costs. The model used for this planning is called spectrum.

**resource use and development opportunities** - A possible action, measure, or treatment and corresponding goods and services identified and introduced during the scoping process. It may subsequently be incorporated into and addressed by the land and resource management plan in terms of a management prescription.

**responsible line officer** - The Forest Service employee who has the authority to select and/or carry out a specific planning action.

**retention** - A visual quality objective in which man's activities are not evident to the casual forest visitor.

**revegetation** - The re-establishment and development of a plant cover. This may take place naturally through the reproductive processes of the existing flora or artificially through the direct action of humans (e.g.: afforestation and range reseeding).

**revision** - To make the plan new or up-to-date. Plan revision must be considered and approved in accordance with the requirements for the development and approval of a forest plan. Revisions take place every 10-15 years, but may occur more frequently if conditions or public demands change significantly.

**right-of-way** - A right of use across the lands of others. It generally does not apply to absolute purchase of ownership. Land authorized to be used or occupied for the construction, operation, maintenance, and termination of a project or facility passing over, upon, under, or through such land.

**riparian** - Land areas directly influenced by water. They usually have visible vegetative or physical characteristics showing this water influence. Streamside, lake borders, and marshes are typical riparian areas.

**riparian areas** - Areas with three-dimensional ecotones of interaction that include terrestrial and aquatic ecosystems that extend down into the groundwater, up above the canopy, outward across the floodplain, up the near-slopes that drain to the water, laterally into the terrestrial ecosystem, and along the watercourse at a variable width.

**riparian corridor** - An administrative zone applied to both sides of a stream or along side a pond, lake, wetland, seep or spring. It is a fixed width by stream type that may fall within or beyond the true riparian area.

**riparian functions** - Activities that occur in a riparian area without the influence of management activities. Functions include erosion and deposition by the streams, nutrient cycling, movement and storage of water, vegetative succession, etc.

**ripping** - A process where the soil is mechanically sliced or broken to improve tilth, aeration, and permeability.

#### **river classifications (Wild and Scenic Rivers)**

(1) **wild** - Rivers or sections of rivers that are free of impoundments and generally inaccessible except by trail, with watersheds or shorelines essentially primitive and waters unpolluted. These represent vestiges of primitive America.

(2) **scenic** - Rivers or sections of rivers that are free of impoundments, with shorelines or watersheds still largely primitive and shorelines largely undeveloped, but accessible in places by roads.

(3) **Recreational** - Rivers or sections of rivers that are readily accessible by road or railroad, that may have some development along their shorelines, and that may have undergone some impoundment or diversion in the past.

**road** - A motor vehicle travelway over 50 inches wide, unless designated and managed as a trail. A road may be classified, unclassified or temporary. (1) *Classified roads*. Roads wholly or partially within or adjacent to National Forest System lands that are determined to be needed for long-term motor vehicle access, including State roads, county roads, privately owned roads, National Forest System

roads, and other road authorized by the Forest Service. (2) *Temporary Roads*. Roads authorized by contract, lease, other written authorization, or emergency operation not intended to be part of the forest transportation system and not necessary for long-term resource management. (3) *Unclassified Roads*. Roads on National Forest System lands that are not managed as part of the forest transportation system, such as unplanned roads, abandoned travelways, and off-road vehicle tracks that have not been designated and managed as a trail; and those roads that were once under permit or other authorization and were not decommissioned upon the termination of the authorization.

**road - constant service** - A facility on the transportation system developed and operated for long-term land management and resource utilization needs. It is also operated for continuous or annual recurrent service. System-open roads generally remain open for public use except for seasonal closures to prevent road damage due to bad weather conditions.

**road - intermittent service** - A facility on the transportation system that is developed and operated for long-term land management and resource utilization needs. It is operated for periodic service and closed for more than one year between periods of use. System-closed roads are generally built to access logging sites and are closed once logging activities are completed. They can be re-opened several years later, however, when access is once again needed to the site.

**road closure** - A technique used by management to regulate and control the use of facilities to achieve transportation economy, user safety, protection of the public investment, and accomplishment of forest resource objectives. It may be intermittent or long term.

**road density** - A measure of the total length of road in any given unit of area (e.g.: 4 miles/square mile.)

**road maintenance levels** - A formally established set of objectives that describes the conditions necessary to achieve the planned operation of a road. The levels vary from Level I, basic custodial care, to Level V, which is assigned high use roads in which user safety and comfort are important considerations.

**roadless area** - Undeveloped federal land within which there are no improved roads or roads maintained for travel by means of motorized vehicles intended for highway use.

**Roadless Area Review and Evaluation (RARE) II** - The assessment of "primitive" areas within the national forests as potential wilderness areas as required by the Wilderness Act documented in the final environmental impact statement of the Roadless Area Review and Evaluation, January 1979.

**RARE II area** - An area of land identified during the RARE II and the re-evaluation process as having potential for inclusion in the National Wilderness Preservation System.

**RARE II inventory boundary** - A boundary established with public input surrounding large areas of primarily Forest Service lands for the purpose of evaluation during the RARE II process. These lands meet minimum Forest Service criteria for potential wilderness.

**rollover** - A maximum PNV solution with an individual good or service production constrained at its maximum potential level. It provides an economically efficient basis for comparing all benchmark levels.

**rotation** - The number of years required to establish, including the regeneration period and grow timber crops, to a specified condition or maturity for harvest. Even- and two-aged management prescriptions in the Forest Plan use a rotation.

**roundwood** - Timber and fuelwood prepared in the round state - from felled trees to material trimmed, barked, and crosscut (e.g.: logs and transmission poles).

**RPA Program** - The recommended direction for long-range management of renewable resources of National Forest System lands. This direction serves as the basis for the regional targets assigned to the forest. The development of this direction is required by the Forest and Rangeland Renewable Resources Planning Act.

**runoff** - The total stream discharge of water from a watershed including surface and subsurface flow, but not groundwater. Usually expressed in acre-feet.

**rural** - A recreation opportunity spectrum classification for areas characterized by a substantially modified natural environment. Sights and sounds of man are evident. Renewable resource modification and utilization practices enhance specific recreation activities or provide soil and vegetative cover protection.

**rural water use** - Term used in previous water-use circulars to describe water used in suburban or farm areas for domestic and livestock needs. The water is generally self-supplied.

## **S**

**SAA** - Southern Appalachian Assessment

**sale schedule** - The quantity of timber planned for sale by time period from an area of suitable land covered by a forest plan. The first period (usually a decade) of the selected sale schedule provides the allowable sale quantity. Future periods are shown to establish that long-term sustained yield will be achieved and maintained.

**salmonids** - Fish of the family salmonidea, the chars, trouts, salmon, and whitefishes.

**salvage cutting** - The removal of dead trees or trees being damaged or killed by injurious agents other than competition. To recover value that would otherwise be lost.

**sanitation cutting** - The removal of trees to improve stand health and to reduce actual or anticipated spread of insects and disease.

**sapling** - A usually young tree that is larger than a seedling, but smaller than a pole. Size varies by region.

**Savannas** - An open area with trees covering less than 25 percent and with herbaceous species dominating.

**sawtimber** - Trees suitable in size and quality for producing logs that can be processed into dimension lumber.

**scalloping** - The undulating vegetative treatment given to a roadside for aesthetic purposes.

**Scenery Management System** - A system for the inventory and analysis of the aesthetic values of the National Forest Lands. It replaces the Visual Management System (VMS) as defined in Agricultural Handbook #462. The primary components of the SMS include: Landscape Character, Scenic Attractiveness, Existing Scenic Integrity, Concern Levels, Seen Areas, Scenic Classes, which are developed in the inventory. The Forest Plan components are Landscape Character Goals, Scenic Integrity Levels, Scenic Integrity Objectives, and Standards and Guidelines. These give management direction for the management areas.

National Forest land area is mapped as ecological sections or subsections but may be other land units. Landscape Character descriptions are developed for mapping Scenic Attractiveness, Class A-Distinctive, B-Typical, and C-Indistinctive areas. These help determine the high priority scenic areas. Existing Scenic Integrity Levels indicate the degree of intactness and wholeness of the existing landscape character. Very High Scenic Integrity Level is an unaltered landscape, High Scenic Integrity Level is a landscape that appears unaltered, Moderate Scenic Integrity Level is a landscape that is slightly altered, Low Scenic Integrity Level is a landscape that is moderately altered, Very Low Scenic Integrity Level is a landscape that is heavily altered, and Unacceptably Low Scenic Integrity Level is a landscape that is extremely altered.

Concern Levels are a measure of the degree of public importance placed on the landscape viewed from travel ways and use areas. Concern Levels reflect both the number of visitors and the interest of visitors in scenery. Concern Level 1 areas include primary recreation areas, very high use roadways, major roadways and trails through the forest, and places with moderate use where nearly all visitors are very concerned about scenery. Concern Level 2 areas include mostly secondary recreation areas, secondary roadways, trails, and places with moderate use and visitors with moderate interest in scenery. Concern level 3 travel ways and areas are those which receive very little use and/or use is primarily by visitors not concerned with scenery.

After Concern Levels are determined, the visibility of each area is mapped. Foreground is defined as up to ½ mile from the viewer, Middleground is ½ mile to 4 miles, and Background is over 4 miles from the viewer. The Seldom Seen areas are



also mapped.

Scenic Classes are determined by overlaying Scenic Attractiveness, Landscape Visibility, and Concern Level. The matrix in Table 4-2 page 4-16 from the SMS handbook is used. Scenic Class 1 scenery has extremely high public value, Scenic Class 2 scenery has very high public value, Scenic Class 3 scenery has high public value, Scenic Class 4 scenery has moderately high public value, Scenic Class 5 scenery has moderate public value, Scenic Class 6 scenery has moderately low public value, and Scenic Class 7 scenery has low public value. The Scenic Classes are used during the Forest planning process to compare the value of scenery to other resources.

Scenic Integrity Objectives (SIOs) and Landscape Character Goals are developed for Forest Plan Management Areas. Scenic Integrity Objectives are Very High-unaltered, High-appears unaltered, Moderate-slightly altered, and Low-moderately altered. The SIO that is assigned to a management area in the Forest Plan may be different than that of its existing Scenic Integrity Level indicating that any new management will meet the constraints of the assigned SIO.

**Scenic Attractiveness** - The scenic importance of a landscape based on human perceptions of the intrinsic beauty of landform, rockform, waterform, and vegetation pattern. Classified as A (Distinctive), B (Typical or Common), or C (Undistinguished).

**Scenic Class** - A system of classification describing the importance or value of a particular landscape or portions of that landscape. Values range from 1 (highest value) to 7 (lowest value).

**scenic integrity objective** - A desired level of excellence based on physical and sociological characteristics of an area. Refers to the degree of acceptable alterations of the characteristic landscape. Objectives include Very High, High, Moderate, and Low.

**Very High (VH)** - Generally provides for only ecological changes in natural landscapes and complete intactness of landscape character in cultural landscapes.

**High (H)** - Human activities are not visually evident to the casual observer. Activities may only repeat attributes of form, line, color, and texture found in the existing landscape character.

**Moderate (M)** - Landscapes appear slightly altered. Noticeable human created deviations must remain visually subordinate to the landscape character being viewed.

**Low (L)** - Landscapes appear moderately altered. Human created deviations begin to dominate the valued landscape character being viewed but borrow from

valued attributes such as size, shape, edge effect, and pattern of natural openings, vegetative type changes, or architectural styles outside the landscape being viewed.

**scoured channel** - A definable channel of flow where surface water converges with enough energy to remove soil, organic matter, and leaf litter.

**secondary processor** - A mill that processes partially manufactured wood (a wood product such as chips or lumber), into a finished product. Examples include paper and furniture.

**secondary trout streams** - Streams that do not contain naturally-reproducing trout populations, but will sustain trout throughout the year. Populations must be maintained by stocking.

**sediment** - Solid mineral and organic material that is in suspension, is being transported, or has been moved from its site of origin by air, water, gravity, or ice.

**seedling/sapling stands** - Stands at least 16.7 percent stocked with growing stock trees, of which more than one-half of total stocking is seedlings and saplings.

**seed tree** - An even-aged regeneration method where in a single cut, the removal of all merchantable trees in a stand, except for a small number of widely dispersed trees retained for seed production, and to produce a new age class in a fully-exposed microenvironment.

**seed-tree with reserves method** - A two-aged regeneration method in which some or all of the seed trees are retained after regeneration has become established to attain goals other than regeneration.

**seep** - A wet area where a seasonal high water table intersects with the ground surface. Seeps that meet the definition of a wetland are included in the Riparian Corridor.

**selected species** - Species selected as indicators of the effects of management. Term is the same as management indicator species.

**selection cutting** - The removal of selected trees, particularly mature trees at planned intervals (cutting cycle), individually or in small groups, from an uneven-aged forest to realize the yield, and establish a new crop of desired tree species. Additionally, the tending of immature stand components are accomplished at each cutting cycle.

**sensitive species** - Those species that are placed on a list by the Regional Forester for which population viability is a concern. In this Region we generally use Natural Heritage rankings G1-3, N1-3, T1-3 or H, and USDI Fish and Wildlife Service candidates as a basis for developing the list.

**sensitivity analysis** - A determination of the consequences of varying the level of one or several factors while holding other factors constant.

**sensitivity level** - A particular degree or measure of viewer interest in the scenic qualities of the landscape.

**sequential lower bounds** - The maximum percent decrease in harvest volume in any decade as compared to the preceding decade. This prevents the forest from significantly decreasing its share of the market, which would violate the assumptions of the horizontal demand curve.

**sequential upper bounds** - The maximum percent increase in harvest volume in any decade as compared to the preceding decade. This prevents the forest from significantly increasing its share of the market, which would violate the assumptions of the horizontal demand curve.

**shearing** - A method used in land clearing whereby tree stems are severed at ground line by large bladed mechanisms mounted on crawler tractors (e.g.: serrated tooth V-blade or KG blade).

**shelterwood** - A regeneration method of regenerating an even-aged stand in which a new age class develops beneath the partially shaped microenvironment provided by the residual trees. The sequence of treatments can include three distinct types of cuttings: (1) an optional preparatory harvest to enhance conditions for seed production; (2) an establishment harvest to prepare the seed bed, and to create a new age class; and 3) a removal harvest to release established regeneration from competition with the overwood.

**shelterwood with reserves** - A two-aged regeneration method in which some or all of the shelter trees are retained, well beyond the normal period of retention, to attain goals other than regeneration.

**short-term facilities** - Facilities developed and operated for limited resource activity or other project needs. It will cease to exist as a transportation facility after the purpose for which it was constructed is completed, and the occupied land is reclaimed and managed for natural resource purposes.

**silvicultural system** - A management process whereby forests are tended, harvested, and replaced, resulting in a forest of distinctive form. Systems are classified according to the method of carrying out the fellings that remove the mature crop, and provide for regeneration and according to the type of forest thereby produced.

**silviculture** - The art and science of controlling the establishment, growth, composition, health, and quality of forests and woodlands. Silviculture entails the manipulation of forest and woodland vegetation in stands and on landscapes to meet the diverse needs and values of landowners and society on a sustainable basis.

**silvics** – The study of the life history and general characteristics of forest trees and stands, with particular reference to environmental factors, as a basis for the practice of silviculture.

**single-tree selection** - A regeneration method of creating new age classes in uneven-aged stands in which individual trees of all size classes are removed uniformly throughout the stand to achieve desired stand structural characteristics.

**site** - An area in which a plant or stand grows, considered in terms of its environment, particularly as this determines the type and quality of the vegetation the area can carry.

**site class** - A classification of site quality, usually expressed in terms of ranges of dominant tree height at a given age or potential mean annual increment at culmination.

**site preparation** - The preparation of the ground surface prior to reforestation. Various treatments are applied as needed to control vegetation that will interfere with the establishment of the new crop of trees or to expose the mineral soil sufficiently for the establishment of the species to be reproduced.

**site index** – A series-specific measure of actual or potential forest productivity (site quality, usually for even-aged stands), expressed in terms of the average height of trees included in a specified stand component (defined as a certain number of dominants, codominants, or the largest and tallest trees per unit area) at a specified index or base age.

**site productivity class** - A species-specific classification of forest land in terms of inherent capacity to grow crops of industrial, commercial wood. Usually derived from the site index.

**site quality (productivity)** - The productive capacity of a site, usually expressed as volume production of a given species.

**skid trails** - A travel way through the woods formed by loggers dragging (skidding) logs from the stump to a log landing without dropping a blade and without purposefully changing the geometric configuration of the ground over which they travel.

**skidding** - A term for moving logs by dragging from stump to roadside, deck, or other landing.

**slash** - The residue left on the ground after felling, silvicultural operations, or as a result of storm, fire, girdling, or poisoning. All vegetative debris resulting from the purchaser's operations. Slash associated with construction of roads is subject to treatment according to construction specifications, all other is subject to the terms of contract provision B/BT6.7.

**snag** - A dead or partially dead (more than 50 percent) hardwood or pine tree which is used by many bird species for perching, feeding, or nesting.

**social analysis** - An analysis of the social (as distinct from the economic and environmental) effects of a given plan or proposal for action. It includes identification and evaluation of all pertinent desirable and undesirable consequences to all segments of society, stated in some comparable quantitative terms, including persons or percent of population in each affected social segment. In addition, social analysis also includes a subjective analysis of social factors not expressible in quantitative terms.

**soil enhancement** - Application of methods or materials to the soil to increase its productivity and stimulate growth of vegetation.

**soil productivity** - The inherent capacity of a soil to support the growth of specified plants, plant communities, or a sequence of plant communities. Soil productivity may be expressed in terms of volume or weight/unit area/year, percent plant cover, or other measures of biomass accumulation.

**soil survey** - A term for the systematic examination of soils in the field and in laboratories; their description and classification; the mapping of kinds of soil; the interpretation of soils according to their adaptability for various crops, grasses, and trees; their behavior under use of treatment for plant production or for other purposes; and their productivity under different management systems.

**soil and water resource improvement** - The application of preplanned treatment measures designed to favorably change conditions of water flow, water quality, rates of soil erosion, and enhancement of soil productivity.

**southern pine beetle** - One of the many species of pine bark beetles that are present in the forest at all times. When environmental and forest conditions become favorable, the beetle populations can increase and cause substantial timber losses over extensive areas in a relatively short period of time.

**spatial feasibility testing** - A process for verifying on a sample basis that land allocation and scheduling is actually implementable on the ground.

**special concern species** - Species that is federally listed as Category 2 or ranked as globally rare by state heritage programs and The Nature Conservancy. Also used by some states for any species of wild animal native or once-native to the state which is determined by the state to require monitoring.

**special-use authorization** - A permit, term permit, or easement that allows occupancy, use, rights, or privileges of National Forest System land.

**special use permit** - A permit issued under established laws and regulations to an individual, organization, or company for occupancy or use of National Forest land for some special purpose.

**splash dams** - Dams, usually temporary, built of wood across mountain streams to pond up large amounts of water.

**spring** - A water source located where water begins to flow from the ground due to the intersection of the water table with the ground surface. Generally flows throughout the year. Springs that are the source of perennial or intermittent streams are included in the Riparian Corridor.

**stand** - A contiguous group of trees sufficiently uniform in age-class distribution, composition, and structure, and growing on a site of sufficiently uniform quality, to be a distinguishable unit.

**stand density** - A quantitative measure of stocking expressed either absolutely per unit of land in terms of number of trees, basal area, volume per unit area, or relative to some standard condition.

**stand improvement** - A term comprising all intermediate cuttings made to improve the composition, structure, condition, health, and growth of even-aged, two-aged, or uneven-aged stands.

**standard** - Requirement that precludes or imposes limitations on resource management practices and uses. Usually for resource protection, public safety, or addressing an issue.

**state, county, and municipal land** - Land owned by states, counties, and local public agencies or municipalities, or land leased to these governmental units for 50 years or more.

**stocking** - The degree of occupancy of land by growing stock trees, measured by basal area or number of trees per unit area and spacing compared with a minimum standard - which varies by tree size and species or species group - to the occupancy that is required to fully utilize the growth potential of the land.

**stratified mixture** - A stand in which different tree species occupy different strata of the total crown canopy.

**stratigraphic** - Pertaining to strata or layers, as in a description of layers of rock types.

**stratum (canopy layer)** - A distinct layer of vegetation within a forest community.

**Streamside Management Zones** - Land areas adjacent to natural streams, lakes, ponds, and seeps. These zones are typically designed to reduce, minimize or prevent non-point source pollution from entering a stream system (e.g.: sediment from a road or timber harvesting activity). Specific SMZ buffer widths are often defined in State Best Management Practice handbooks.

**stressors** - Pressure or change brought upon an ecosystem by pollution sources including sediment, contaminants, and toxins.

**successional stage** - A period, marked by distinctiveness of structure, in the development of a forest community from establishment of tree regeneration to

advanced age. In general, successional stages used in the Environmental Impact Statement and the Forest Plan are defined in terms of forest age as a surrogate measure of the distinct structure at each stage *generally* as follows:

<u>Stage</u>	<u>Pine Types</u>	<u>Hardwood Types</u>
Early	0 – 10 years old	0 – 10 years old
Sapling/Pole	11 – 20 years old	11 – 40 years old
Mid	21 – 60 years old	41 – 80 years old
Late	61+ years old	81+ years old

For a complete discussion of the ages within the different successional stages/forests by forest community type, refer to the process record titled Forest Community Types and Forest Successional Classes for National Forests in the Southern Appalachian Plan Revisions.

**suitability** - The appropriateness of applying certain resource management practices to a particular area of land, as determined by an analysis of the economic and environmental consequences and the alternative uses foregone. A unit of land may be suitable for a variety of individual or combined management practices.

**suitable forest land** - National Forest System land allocated by a Forest Plan decision to be managed for timber production on a regulated basis. *Regulated basis* means a systematic relationship between tree growth and timber harvest such that a specific timber volume objective level can be sustained indefinitely.

**supply** - The amount of a good or service that producers are willing to provide at a specified price, time period, and conditions of sale.

**surficial water** - Water on or at the ground surface. Does not include ditches, canals, spillways, or other human-created flow channels.

**sustained yield of the products and services** - The achievement and maintenance in perpetuity of a high-level annual or regular periodic output of the various renewable resources of the National Forest System without impairment of the productivity of the land.

**sympatric** – Condition where two or more closely related species live together in the same section of stream. The species have overlapping distributions. Opposite of allopatric.

## T

**targets** - Objectives assigned to the forest by the Regional Plan.

**taxomic** – Classification of organisms into categories according to their natural relationships.

**temporary roads** - These are low standard, generally single use facilities to access an area with no permanent road access. The road is authorized by contract, permit,

lease, or other written authorization, or for emergency operations. The road is not part of the forest transportation system and is not necessary for long-term resource management. The road is for non-recurrent use and the location will be restored to near original condition after use by seeding or tree planting. Any cutting, filling or culverts should be removed as part of restoration. The road location should be sufficiently blocked to not allow any continued use by vehicular traffic.

**tentatively suitable forest land** - National Forest System land that meets specific criteria in the implementing regulations of the National Forest Management Act (36 CFR 219.14 for further consideration during the planning process for timber production on a regulated basis. Note that “tentatively suitable land” is not the same as the allocation of the existing Forest Plan, as amended since 1985, but is identified by a reanalysis. (Also called “Phase 1 suitability” or “Stage 1 suitability” because its designation as Part “A” of a three-part process described by the text of the National Forest Management Act.) (Timber Supply/Demand).

**term permit** - A special-use authorization to occupy and use National Forest System land, other than rights-of-way, for a specified period. It is revocable and compensable according to its terms.

**theming** - A land and/or management scheme created with the list of land and/or management.

**thermoelectric power water use** - Water used in the process of the generation of thermoelectric power.

**thinning** - A cutting made to reduce stand density of trees primarily to improve growth, enhance forest health, or to recover potential mortality.

**thinning interval** - The period of time between successive thinning entries, usually used in connection with even-aged stands.

**threatened species** - Any species that is likely to become an endangered species within the foreseeable future throughout all or a significant portion of its range. Designated as a threatened species in the *Federal Register* by the Secretary of Interior.

**tiering** - A National Environmental Policy Act term used to reference the coverage of general matters in broader environmental impact statements (including national program or policy statements), with subsequent narrower statements or environmental analyses (including regional or basinwide program statements or ultimately site-specific statements), incorporating by reference the general discussions and concentrating solely on the issues specific to the statement subsequently prepared.

**timber** - Wood retaining many of the recognizable characteristics of a tree: round, bark covered, and tapering, but without the limbs and leaves. In wood-industry usage, it may be “standing timber”- that portion of living trees with characteristics of value to



the wood-using industry, or cut trees not yet processed beyond removing limbs and tops.

**timber demand** - A relationship between stumpage or delivered log price and the quantity of timber produced.

**timber product market area** - The geographic area enclosed within a polygon drawn by connecting those mills buying forest timber that are the farthest away from the forest.

**timber production** - The purposeful growing, tending, harvesting, and regeneration of regulated crops of trees to be cut into logs, bolts, or other round sections for industrial or consumer use. For purposes of forest planning, timber production does not include the production of fuelwood or harvests from unsuitable lands.

**timber removals (drain)** - The merchantable volume of trees removed from the inventory by harvesting, cultural operations including stand improvement, land clearing, or changes in land use expressed as an annual average between surveys. Within national forests, removals are almost all timber harvest except that the inventory on lands withdrawn by legislative action is also normally accounted for as "removals."

**timber sale program quantity** - The volume of timber planned for sale during the first decade of the planning horizon. It includes the allowable sale quantity (chargeable volume), and any additional material (non-chargeable volume), planned for sale. The timber sale program quantity is usually expressed as an annual average for the first decade.

**timber stand improvement** - A term comprising all intermediate cuttings made to improve the composition, constitution, condition, and increment of a timber stand.

**timber supply** - The amount of wood raw material available to be harvested within specified parameters of time and geographic area.

**timberland** - Forest land that is producing or capable of producing in excess of 20 cubic feet per acre per year of industrial wood crops under natural conditions. Not withdrawn from timber utilization, and not associated with urban or rural development. Currently, inaccessible and inoperable areas are included.

**tolerance** - The ability of a tree to grow satisfactorily in the shade of, and in competition with, other trees.

**topography** - The configuration of a land surface including its relief, elevation, and the position of its natural and human-made features.

**toxicity index profile** - Estimate of cumulative potential for toxic impacts in water.

**trailheads** - The parking, signing, and other facilities available at the terminus of a trail.

**traffic service levels** – Describe a road's significant traffic characteristics and operating conditions.

**transfer age** – The age a stand will transfer from one Model 2 management class to another.

**transfer class** – A Model 2 management class that receives transferred acres. A regeneration transfer class has a transfer age of zero. All other transfer classes have an age greater than zero.

**transfer columns** – A column constructed the matrix generator to create special LP structures. They accumulate information from several decision variables into one column.

**two-aged silvicultural system** - A planned sequence of treatments designed to maintain and regenerate a stand with two age classes.

**two-aged stand** - A stand composed of two distinct age classes that are separated in age by more than 20 percent of rotation.

**type conversion** - A change from tree species or species group to another. An example is a change from hardwoods to pine.

## **U**

**undercutting (root pruning)** - The root pruning of seedlings in a nursery bed.

**understory** - The trees and other vegetation growing under a more or less continuous cover of branches and foliage formed collectively by the upper portion (overstory) of adjacent trees and other woody growth.

**uneven-aged regeneration methods** - Methods of regenerating a forest stand, and maintaining an uneven-aged structure by removing some trees in all size classes either singly, in small groups, or strips. The methods are single-tree or group selection.

**uneven-aged silvicultural system** - A planned sequence of treatments designed to maintain and regenerate a stand with three or more age classes.

**universal soil loss equation** - An equation used to estimate soil erosion rates and for the design of water erosion control systems.  $A = RKLSPC$  wherein A = average annual soil loss in tons per acre per year; R = rainfall factor; K = soil erodibility factor, L = length of slope; S = percent of slope; P = conservation practice factor; and C = cropping and management factor.

**unregulated forest** - Commercial forest land that will not be organized for timber production under sustained-yield principles.

**unsuitable forest land (not suited)** - Forest land not managed for timber production because: (a) Congress, the Secretary [of Agriculture], or the Chief [of the

Forest Service] has withdrawn it; (b) it is not producing or capable of producing crops of industrial wood; (c) technology is not available to prevent irreversible damage to soils productivity, or watershed conditions; (d) there is no reasonable assurance based on existing technology and knowledge, that it is possible to restock lands within five years after final harvest, as reflected in current research and experience; (e) there is, at present, a lack of adequate information about responses to timber management activities; or (f) timber management is inconsistent with, or not cost efficient in meeting the management requirements and multiple-use objectives specified in the Forest Plan.

**urban** – An area characterized by a substantially urbanized environment. The background may have natural-appearing elements.

**utilization standards** - Measurements for standing trees that describe the minimum size tree that will be designated for sale for various products including sawtimber or small roundwood.

## **V**

**values, market** - Prices of market goods and services measured in real dollars in terms of what people are willing to pay as evidenced by market transactions.

**values, non-market** - Prices of non-market goods and services imputed from other economic values.

**vector** – A matrix composed of only one row or column.

**viable population** - Population of plants or animals that has the estimated numbers and distribution of reproductive individuals to ensure its continued existence is well distributed in the planning area.

**viewshed** - The total landscape seen, or potentially seen from all or a logical part of a travel route, use area, or water body.

**visual quality objective** - A desired level of excellence based on physical and sociological characteristics of an area under the Visual Management System. Refers to the degree of acceptable alterations of the characteristic landscape. Objectives include Preservation, Retention, Partial Retention, Modification, and Maximum Modification. The Visual Management System (VMS) as defined in Agricultural Handbook #462 and was replaced by the Scenery Management System.

**visual resource** - The composite of basic terrain, geological features, water features, vegetative patterns, and land-use effects that typify a land unit and influence the visual appeal the unit may have for visitors.

## **W**

**warm water fishery** - Aquatic habitats that support fish species which have their best reproductive success and summer water temperature tolerance between 75 and 85 degrees Fahrenheit (23-29 C), or about 80 degrees Fahrenheit. Examples include sunfish species, and largemouth bass.

**water supply area** - Areas that serve present and future municipal water supply and trout hatching or rearing operations.

**water yield** - The measured output of the forest's streams expressed in acre-feet. The amount or volume of water that flows in a given period of time from a watershed.

**waterbars** - A change in the grade of a roadbed, trail surface, or fire line used to divert water off the surface to prevent it from eroding ruts and possibly carrying sediment to a stream.

**watershed** - The total area above a given point on a stream that contributes water to the flow at that point.

**Weeks Act** - Implemented in 1911, it authorized the acquisition of lands on the watershed of navigable streams for the purposes of conserving their navigability, or for the purpose of timber.

**wetlands** - (pursuant to the Federal Clean Water Act) - Areas that are inundated or saturated by surface or ground water at a frequency and duration sufficient to support, and that under normal circumstances, support a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands generally include swamps, marshes, bogs and similar areas, and are found primarily within palustrine systems; but may also be within riverine, lacustrine, estuarine, and marine systems.

**wild and scenic river** - A river selected for nomination and/or designation through the Wild and Scenic Rivers Act of 1968 for possessing outstandingly remarkable scenic, recreational, geologic, fish and wildlife, historic, cultural or other similar values.

**wilderness** - A Congressionally-designated area that is part of the National Wilderness Preservation System established through Wilderness Act of 1964; Also defined in the Act as a wilderness, in contrast with those areas where man and his own works dominate the landscape, is hereby recognized as an area where the earth and its community of life are untrammelled by man, where man himself is a visitor who does not remain. An area of wilderness is further defined to mean in this chapter an area of underdeveloped Federal land retaining its primeval character and influence, without permanent improvements or human habitation, which is protected and managed so as to preserve its natural conditions and which (1) generally appears to have been affected primarily by the forces of nature, with the imprint of man's work substantially unnoticeable; (2) has outstanding opportunities for solitude or a primitive and unconfined type of recreation; (3) has at least five thousand acres of land or is of sufficient size as to make practicable its preservation and use in an

unimpaired condition; and (4) may also contain ecological, geological, or other features of scientific, educational, scenic, or historical value.

**Wilderness Act of 1964** – Act which gave Congress authority to designate certain areas of public land as wilderness. It established the National Wilderness Preservation System to secure an enduring resource of wilderness.

**wilderness study area** - One of the areas selected by the Chief of the Forest Service from an inventory of undeveloped National Forest System lands as having apparent high qualities for wilderness. Lands possessing the basic characteristics of wilderness and designated by Congress for further wilderness study. A study can determine whether they should be recommended for addition to the National Wilderness Preservation System.

**wildland fire** - Any non-structural fire on wildlands other than one intentionally set for management purposes. Confined to a predetermined area. Not to be confused with “fire use,” which includes prescribed fire.

**wildland urban interface** – The line, area, or zone where structures and other human development meet or intermingle with undeveloped wildland or vegetative fuels.

**wildlife** - All non-domesticated mammals, birds, reptiles, and amphibians living in a natural environment, including game species and non-game species. Animals, or their progeny (i.e., feral animals - including horses, burros, and hogs), that once were domesticated, but escaped captivity, are not considered wildlife.

**wildlife and fish user-day** – A 12-hour participation in the use of wildlife and fish primarily for consumptive or non-consumptive use including hunting, fishing, or wildlife viewing. Such use is the result of habitat management, and the populations supported by that habitat. A WFUD is counted as one day or any part of a day that the user participated in these activities. Does not include sport or commercial uses of anadromous fish.

**wildlife habitat diversity** - The distribution and abundance of different plant and animal communities and species within a specific area.

**wildlife habitat improvement** - The manipulation or maintenance of vegetation to yield desired results in terms of habitat suitable for designated wildlife species or groups of species.

**wildlife tree** - A den tree, snag, or mast or food tree.

**with-without comparison** - An evaluation that compares outputs, benefits, costs, and other effects with a base alternative.

**withdrawal** – Water removed from the ground or diverted from a surface water source for use.

**withdrawal of land** - An order removing specific land areas from availability for certain uses.

**withdrawn national forest lands** - National Forest System lands segregated or otherwise withheld from settlement, sale, location, or entry under some or all of the general land laws.

**Woodlands** - An open stand of trees with crowns not usually touching (generally forming a 25 to 60 percent cover).

**woodland grazing** - Grazing livestock on the grass-forbs existing under forested stands, mainly southern yellow pine types.

**wrenching** - The disturbance of seedling roots in a nursery bed (e.g.: with a tractor-drawn blade), with the objective of stimulating the development of a fibrous root system.

## **X**

**xeric** - Pertaining to sites or habitats characterized by decidedly dry conditions.

## **Y**

**yarding** - A term used to describe operations used to move logs from stump to point where logs are loaded for transport to mill. Most commonly used in cable logging operations.

**yield composite** - Activity and output relationships which estimate yields. They allow the development of a yield stream from a related yield stream without entering each yield coefficient independently. Yield composite relationships can be time, age, or sequence based.

**yield stream** - A subset of a yield table containing specific information for an activity or output. A timber output may have a yield stream for amount, diameter, basal area, or trees.

**yield table** - A tabular statement of outputs expected to be produced under a specific set of conditions.

## **Z**

**zone** - Large, contiguous areas of land that include watersheds or management areas. It can be comprised of several complete analysis units. The land within a zone is generally a heterogenous mixture of environmental types.

**zone management actions** - Management actions available to zones. They contain the ability to coordinate the management activities that occur within a zone.

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